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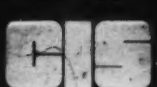

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AIDS RESEARCH

HEARING

BEFORE THE

COMMITTEE ON LABOR AND HUMAN RESOURCES UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

REVIEWING PROGRESS BEING MADE IN AIDS RESEARCH

MAY 15, 1987

Printed for the use of the Committee on Labor and Human Resources

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AIDS RESEARCH

FRIDAY, MAY 15, 1987

U.S. SENATE,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 2:13 p.m., in room SD-430, Dirksen Senate Office Building, Senator Edward M. Kennedy, (chairman) presiding.

Present: Senators Kennedy, Adams, Thurmond, Harkin, and Pell.

OPENING STATEMENT OF SENATOR KENNEDY

The CHAIRMAN. We will come to order.

Today we face the most serious threat to the public health encountered by our society in this century. AIDS has already claimed the lives of more than 20,000 Americans and will affect nearly ten times that number by the end of 1991.

We now know that the virus that causes AIDS does not discriminate, and it can strike men, women, young, old, black and white. We know that the infection has begun to spread into the general population and that our Nation's young people are among those at ever-increasing risk.

For the moment, there is no cure, there is no vaccine.

Our purpose this afternoon is to consider the choices that must be made in confronting this emergency. How can we get the word out about AIDS quickly and extensively, so that the still unknowing and unsuspecting in our country will learn that they must beware.

Are we prepared to begin a comprehensive program of risk reduction and education that reaches every corner of this Nation? There are States and cities in this country where AIDS still seems like "somebody else's problem." Without an aggressive prevention effort, AIDS could one day be everybody's problem.

How can we implement a program of AIDS counseling and testing that reaches the people who are most likely to be infected? What safeguards must we offer to make it possible for these individuals to volunteer for testing?

We know that some States and city health systems are already reeling under the economic impact of this illness. We need innovative approaches to contain care and treatment costs, and we need them soon. And most of all, we need the enduring solutions that only research can produce—effective treatments and a vaccine.

If we respond with concern and compassion and commit the full energy of this great Nation, I believe we can meet these challenges and conquer AIDS, and I believe we should begin today.

[The prepared statement of Senator Kennedy follows:]

from the office of

Senator Edward M. Kennedy

of Massachusetts

Statement of Senator Edward M. Kennedy
on Introduction of Comprehensive AIDS Legislation

EMBARGOED UNTIL:
1 p.m., May 15
CONTACT: Paul Donovan
Robin Buckley
(202) 224-4781

Today, we are introducing the first comprehensive legislation on AIDS that will accelerate and coordinate our nation's response to this deepening public health crisis.

Our four-point plan will:

-- Educate all Americans about AIDS risks and enable them to make informed choices to protect themselves;

-- Develop care and treatment networks for people with AIDS that are more economical and appropriate;

-- Accelerate the search for AIDS vaccines and cures by putting federal funds to work faster;

-- Assure that all Americans have access to voluntary and confidential AIDS testing and counseling and are protected against discrimination.

The AIDS virus is a threat to Americans in all walks of life. It is a sexually transmitted disease that does not discriminate between men and women, young and old, or whites and blacks. It is readily transmitted any time intravenous drug users share needles or syringes. According to the U.S. Public Health Service, by 1991, AIDS will claim more lives each year than the entire Vietnam war. We must act immediately and decisively to halt this killer.

Of the 35,000 Americans that have come down with AIDS, more than 20,000 are already dead. Between one million and two million Americans are already infected with the virus that causes AIDS.

It's been estimated that 20-50% of those infected will become ill -- over time, some researchers say an even larger percentage may develop the deadly disease.

Unless research produces a surprise breakthrough in the treatment area, we are guaranteed to be facing a steadily increasing death toll and astronomical costs. In 1991, the annual cost of AIDS to our society is projected to be $64 billion -- nearly $9 billion for direct care and $55 billion in lost productivity. The vast majority of deaths will occur among people who are already carrying the AIDS virus.

Our immediate obligation is to insure that more and more of our fellow citizens do not become infected. That is why our bill calls for a comprehensive national plan of education, prevention and risk reduction. At the moment, these steps are the only tools available to combat AIDS. We must target our prevention and education effort on those individuals at highest risk, including adolescents, intravenous drug users, gay and bisexual men, blacks and hispanics, and women of child-bearing age.

To do the job, we must rapidly recruit and train new personnel -- and equip them with the resources to help local educators and public health officials reach their communities.

It is essential that we employ the full power of the media to reach every corner of the nation with prevention information.

Unless we develop new approaches for the care and treatment of people with AIDS and related illness, many urban health care systems will face collapse. Today, there are city hospitals in which 25% of the medical beds are occupied by people with AIDS related illness. We must involve more community physicians and provide the means to substitute day care and home care for costly in-patient services. Particularly in cities with a high incidence of cases, a mechanism is needed to coordinate and manage the delivery of care services.

In addition, our bill addresses the critical need for mental health support services. AIDS not only cripples the body; its effect on the mind can be equally devastating.

Because the ultimate answers must be provided through biomedical research, we propose an immediate effort to streamline the procedures for getting federal funds into research labs and clinics. The NIH will be asked to cut grant approval time to no more than six months. Other agencies of the executive branch are required to respond to "AIDS priority" requests within 14 days. We are providing resources to train more researchers and create a network of AIDS research centers across the nation -- just as we have done for cancer. To assist the National Institutes of Health, a special AIDS advisory board will be formed.

In companion legislation that I am developing with Representive Henry Waxman, we will address the pressing issue of confidential AIDS testing, counseling, and anti-discrimination. This legislation will expand voluntary testing programs in a responsible and rational manner.

At this moment, in cities with the highest incidence of AIDS, the waiting time for a blood test is as long as 9 weeks. If an individual suspects he or she is infected and wants to be tested, it is essential that facilities be available.

In keeping with the recommendations of the Centers for Disease Control and the overwhelming consensus of leading public health experts, this measure will encourage individuals at high risk for infection to participate -- by guaranteeing confidentiality and prohibiting discrimination. If -- on the other hand -- we create a program of testing that is punitive, that exposes people to loss of employment or housing, those most likely to be infected will do all in their power to evade the test. We must not treat the victims of illness as villains. AIDS is spreading like wildfire and ideology can't stop it.

One of the most important roles of the Federal Government is to expedite all aspects of the battle against AIDS and to ensure that adequate national resources are available. To a large extent, the specific steps taken will be at the option of state and local officials, who are waging this battle on the front lines, and who are in the best position to make difficult choices that accord with the needs and values of their communities. Our mesage today is that the Congress stands ready, willing and able to help them meet this responsibility.

Last week, in the Senate budget resolution we succeeded in allocating an additional $400 million to combat AIDS for Fiscal Year 1988. This will give us a total of $900 million next year - more than double this year's appropriation.

It is now clear that AIDS has become a global health crisis. If we fail to do all that is within our power to conquer it, our failure will be measured in countless lost lives, untold suffering and hundreds of billions of dollars in future spending. Our ability to respond with care and compassion -- instead of fear and hysteria -- will be the best measure of our success in the months ahead.

Our four-point plan provides new resources and new mechanisms to put the nightmare of AIDS behind us. We will work to see it implemented as fast as possible.

KENNEDY BILL -- AIDS PRIORITIES
(small print gives provisions of the bill)

1. EDUCATION, PREVENTION, RISK REDUCTION

- o FOCUS ON HIGH RISK GROUPS
- o INCREASE MANPOWER AND RESOURCES
- o MEDIA CAMPAIGNS

1) Program through the National Institute on Drug Abuse (NIDA) to reduce transmission amongst IV drug users
2) Adds paid advertising to the national education plan
3) Establishes AIDS Fellowships at the CDC
4) Authorization level set at three times current spending level--$450 million.

2. CARE AND TREATMENT

- o INVOLVE COMMUNITY PHYSICIANS
- o HOME CARE AND DAY CARE
- o COORDINATED SERVICE NETWORKS
- o MENTAL HEALTH

1) Fund coordinated service networks in major incidence areas to move treatment locus to outpatient setting; networks to include hospice, mental health, participation by community physicians, etc.
2) Grants for innovative service delivery models (acute day care, home care, consortia of community physicians)
3) Long term counseling program through the the National Institute of Mental Health
4) Authorizes $100 million

3. ACCELERATED RESEARCH ON VACCINE AND CURE

- o REDUCE GRANT APPROVAL TIMES
- o EXPEDITE AGENCY REQUESTS
- o TRAIN MORE RESEARCHERS
- o AIDS RESEARCH CENTERS
- o ADVISORY BOARD AT NIH

1) Directs the NIH AIDS Coordinator to devise a plan to reduce grant approvals to 6 months from 9 months
2) If NIH AIDS Coordinator stamps "AIDS Priority" federal agencies (OPM, OMB, GSA) must respond in two weeks
3) Institutional training awards to academic medical centers
4) Establish AIDS research centers
5) Establishes AIDS Advisory Board at the NIH
6) Authorizes such sums as are necessary

4. TESTING, COUNSELING AND CONFIDENTIALITY

- o VOLUNTARY TESTING
- o GUARANTEE CONFIDENTIALITY
- o ELIMINATE DISCRIMINATION

1) Senator Kennedy will introduce this companion legislation with Congressman Waxman next week.

The CHAIRMAN. Senator Harkin.

OPENING STATEMENT OF SENATOR TOM HARKIN

Senator HARKIN. Thank you Mr. Chairman. I would like to take just a moment to commend my distinguished colleague from Massachusetts for calling this hearing today. No Congressman or Senator has done more to heighten public awareness of AIDS. He has approached the issue with reason and compassion, and with his persistence I'm confident that this committee can work quickly toward addressing some of the most urgent, as well as the long-term needs of this Nation that are associated with AIDS.

We've all heard the grim statistics on AIDS-related deaths—statistics that are projected into the millennium—and I will not repeat them. But I do think that it's important that people understand that today, with state-of-the-art medicine, if they develop full-blown AIDS, they will die. And so, while we work on a vaccine and a cure for AIDS, I believe it's imperative that we mount an aggressive education campaign of AIDS—and I don't mean public service announcements at 3 in the morning. The greatest enemy in fighting an exponential spread is time—and we can't afford to lose any more. We have learned enough about the cause of AIDS to slow its spread, if we can make some rapid and fundamental changes in our behavior.

I'm pleased to note that we have among our witnesses today a representative, Milt Gossett, from a top-rate advertising firm in New York. I hope he'll be able to tell us a little about what it takes to raise public awareness.

I am also pleased that we have here with us an advocate for the home care of AIDS patients. In many States, sole urban hospitals are being overburdened with the care of these patients from large surrounding areas. In addition, the cost of caring for AIDS patients in the hospital is overwhelming. In many cases, their home care can be the more humane, and at the same time more cost effective approach.

I'll add just one last note: I think that it's important that we remember, as we carry on debate and carry out policy related to AIDS, that AIDS represents the ordinary workings of biology—that it's not an irrational or diabolical plague. AIDS is a deadly disease that works by a mechanism—and we can discover it. This is a very, very serious problem. But let's make sure that we approach it rationally and that we base our judgements on facts—not on pernicious mythologies, misperceptions, ignorance or irrational fears.

Thank you, Mr. Chairman.

The CHAIRMAN. The statements of other Senators that were submitted for the record will be inserted at this point.

[The prepared statements of Senators Simon, Hatch, and Dodd, follow:]

STATEMENT

OF SENATOR PAUL SIMON

May 15, 1987

Senate Labor and Human Resources Committee

AIDS HEARING

Mr. Chairman:

MR. SIMON: I thank the distinguished Chairman and his staff for their work on this issue. I also want to take this opportunity to thank the fine panel of witnesses for their efforts. Many of you have been in the forefront on this and deserve a great deal of credit for bringing the challenges before us to the attention of the committee and to Congress as a whole. Without your diligent leadership, it is clear that the task before us would be even more difficult.

The AIDS virus has become one of the most frightening crisis of our time. With the Center for Disease Control predicting that almost 2 million Americans are now infected with the AIDS virus, it is imperative that steps be taken to halt the spread

of the disease. Devastating figures estimate that within the five states claiming the largest number of AIDS victims, one in every eighty men is a carrier of the disease, and between the ages of thirty and fourty one in nine is infected. These figures are staggering and simply cannot be ignored.

Experts agree that the discovery of a cure in the near future is unlikely, therefore there is no solution but prevention; and the cost of treatment far outweighs the cost of prevention. In the past there has been a great hesitancy on the part of officials to address the issue publicly and that in itself has enhanced the stigma often associated with AIDS. Leadership is absolutely essential in the face of this international tragedy. Rather than shying away from confrontation, we must deal with the issues openly and with honesty. The urgency with which the public needs to be informed is increasing.

Ignorance and lack of knowledge simply cannot be tolerated and education is an essential tool. Myths need to be dispelled in order that people who are infected are not treated inhumanely by those who are afraid of catching AIDS through everyday activities.

As a result of lack of understanding about the disease, a tragic amount of discrimination has occurred in insurance and

medical service access, housing availability and employment. For this very reason confidentiality in testing is crucial. Recent events in our own city ought to serve as a reminder of the importance of confidentiality.

A coordinated efforts that involves education, care and treatment and increased research is crucial. And I support the bill to be introduced later today by the distinguished Committee Chairman.

But it is imperative that we also address the testing issue. I do not believe any legislative proposal addressing AIDS is complete without acting on the testing end. I have also been working with Congressman Waxman on a bipartisan, bi-cameral testing bill. His leadership and sensitivity in this issue is unparalleled in Congress and I strongly support his present efforts.

And if we can just look briefly at the testing issue for a minute. It must be both voluntary and confidential. It must reach the greatest number of at-risk people as well as the greatest number of moderate-risk persons. And this is why. It is my sense that some of the high-risk communities have done a substantial job of educating themselves on this. One obvious exception to that is the IV drug community and much work needs

to be focused there. And in those communities that are painfully aware of this disease, a grave concern is confidentiality and discrimination. Those concerns are well founded and any responsible legislation must account for them.

But frankly, it is the so-called "moderate risk" populations that bother me. They are the millions of Americans, who because of their ignorance and our failure to educate them, **believe they are not at risk.** They are the millions of sexually active young people. We may talk until the end of time about changing morality, but we have always failed legislatively to legislate morality . We must educate these people and encourage them to prevent the contraccion and spread of this fatal disease.

My sense is that there are additional Americans, who because they do not think of themselves as promiscuous, or who, because they reside in a comfortable community where "things like this" just don't happen, are also making decisions based on ignorance. And frankly, I do believe that there are a lot of people spreading this disease unwittingly, people who would never consider that they could be a carrier.

We ought to encourage them to find out the truth, and we ought to encourage them to act accordingly.

The silent, but powerful gain that I see through implementation of a national testing program is this. One of the best ways to facilitate mutual respect, cooperation and compassion is for us to put ourselves in someone else's shoes. Doing so seems to cut through a lot of biases and bigotries and it almost consistently bridges the gap between ignorance and knowledge.

When I think of millions of Americans voluntarily experiencing testing, I think of millions of people struggling with the questions raised by this disease. For any of us to experience the counseling and testing, to question the possibility of a terminal illness without gaining some deeper understanding of the plight of AIDS victims is difficult to imagine. It is clearly one way to raise the education and awareness level of this nation in addition to preventing the spread of the disease.

In the near future, we expect the introduction of Congressman Waxman's legislation. It, in addition to the Chairman's legislation to be introduced today, will provide Congress with a comprehensive attack on AIDS. These efforts do not come too quickly.

The time for a unified attack on this disease is here. It is my sincere hope that my colleagues on both sides of the aisle

can work together to provide true leadership in this area. I look forward to being a part of that effort.

I ask that the statement be inserted into the Committee hearing record.

STATEMENT SENATOR ORRIN G. HATCH
AIDS HEARING
MAY 15, 1987

In 1981, Americans were told of a new disease -- Acquired Immune Deficiency Syndrome(AIDS). Since that time, over 35,000 Americans have been diagnosed with AIDS. Twenty thousand citizens have died from AIDS.

But the story does not end here. Conservative estimates are that 2 million people are currently infected with the AIDS virus. These numbers are important because over the next five years, 30 to 50 percent, or up to 1 million of these Americans, will probably die if a cure is not found, and the number of people being exposed to AIDS appears to be increasing daily.

AIDS is not just a problem for homosexuals or drug abusers. AIDS is a national emergency to which the federal government must respond. We need to show compassion and understanding for those Americans who are infected while we work to find a cure for this dreaded disease. We need to take steps to protect those who are not infected. And we must educate the public about the danger we face if we do not protect ourselves from AIDS.

Since the discovery of AIDS, the federal government has not been idle. During this period, over $1.4 billion has been devoted both to finding a cure and to increasing public awareness. Secretary Bowen has declared AIDS the nation's number one public health problem. Following this declaration, a task force within the Public Health Service was appointed with representatives from the National Institutes of Health, the Centers for Disease Control, the Health Research and Services Administration, and the Alcohol, Drug Abuse and Mental Health Administration. This panel meets every other week to coordinate our public health efforts.

In addition, President Reagan has developed a Presidential Advisory Council on AIDS. This council will be appointed in the near future and I have high hopes for what can and will be accomplished through this advisory body.

And, federally funded research has made progress. For example, the cause of AIDS has been identified. The blood supply has been protected. And, new drugs which slow the progression of the disease are being developed and tested.

These developments are tempered, however, by one simple reality - no one has yet found a cure. Many experts believe that such a cure may take years to identify. Similarly, a vaccine is not yet available and its development is being hampered by technical and legal problems.

We also know how to slow the spread of the disease. The AIDS virus is a sexually transmitted disease. Anyone who has sexual contact with someone who is infected with AIDS is placing themselves at risk of infection. While we have tended to focus on those who may have a high risk of being infected, we should realize that without proper precautions many Americans face the possibility of being infected with this deadly virus.

What precautions can the public take? At the outset, abstinence outside of marriage is the only way to protect yourself against exposure. Second, some public health experts urge the use of condoms. While initial evidence seems to indicate that condoms reduce the risk of AIDS, we must realize that their use is not a guarantee of protection. A recent study of couples where one partner had AIDS, and the other did not, found that 2 of 12 partners became infected over a one to three year period even though they used condoms. And, of course, we must continue to fight the use of illegal drugs, since they increase the risks for this and other diseases.

In order to find more effective ways of preventing the spread of this disease, we also must focus on cures and treatment. More can and must be done to reduce the approval time for making research funds available to individual researchers. Research findings must also be made available to every health care professional in our country. They are on the front lines fighting the fear and misunderstanding of this disease. They are watching Americans die. And state, local, and the federal governments must join this effort by increasing the availability of testing and counseling for Americans, all of whom are at risk of contracting the virus.

Before I close, I must talk about treating our citizens who are suffering from AIDS. AIDS victims are shuttled in and out of hospitals, fervently hoping for a new treatment. I, for one, believe AIDS victims, like all other Americans who are suffering, must have choices, especially the choice to be treated in their own home if a doctor believes it can be done. I have introduced legislation, S. 1206, which would provide Americans who suffer from catastrophic illness the choice of health care services in their home. While it is not only a cost-effective way to provide care, it is also compassionate.

One witness today is Peter Ungvarski, Director of New York City's AIDS Home Care Program. His statement indicates that home care "significantly improves the quality of life...home care allows for use of an appropriate continuum of care... and home care costs substantially less than institutional care." While the average cost of care per person with active AIDS is $800 per day, Mr. Ungvarski will describe his program as providing compassionate health care for $81.40 per day. This is an option that all people suffering from AIDS should have. Peter, I commend you for your work and I appreciate your taking the time to join us today.

I plan on working in a bipartisan manner to fight the dreaded disease of AIDS. Together we must find constructive ways to battle the spread of AIDs, to find a cure, and provide compassionate treatment for those who are suffering from it.

NEWS RELEASE

Chris
Dodd
U.S. Senator
Connecticut

MAY 15, 1987

STATEMENT OF U.S. SENATOR CHRISTOPHER J. DODD

ON INTRODUCTION OF COMPREHENSIVE AIDS LEGISLATION

I AM PLEASED TO BE AN ORIGINAL CO-SPONSOR OF THE FIRST COMPREHENSIVE LEGISLATION AIMED AT ACCELERATING AND COORDINATING OUR COUNTRY'S RESPONSE TO A NATIONAL PUBLIC HEALTH CRISIS, THE AIDS CRISIS.

ACQUIRED IMMUNE DEFICIENCY SYNDROME IS ONE OF THE MOST SERIOUS HEALTH EPIDEMICS IN OUR HISTORY. IT IS TODAY A CRISIS FOR THE UNITED STATES MORE DEADLY THAN MANY WARS OF MODERN TIMES. IT IS ESTIMATED THAT IN JUST FOUR MORE YEARS, THE DISEASE WILL HAVE KILLED MORE AMERICANS THAN THE VIETNAM AND KOREAN WARS COMBINED.

AS OF THE END OF 1986, MORE THAN 29,000 AMERICANS HAD CONTRACTED AIDS. BY 1991, ACCORDING TO THE MOST CONSERVATIVE ESTIMATES, 270,000 PEOPLE WILL HAVE BEEN STRICKEN, 179,000 WILL HAVE DIED - AND NEW CASES INVOLVING HETEROSEXUALS WILL HAVE MULTIPLIED 10-FOLD TO 23,000. ALMOST 4,000 BABIES WILL HAVE CONTRACTED THE DISEASE BY BEING EXPOSED TO THE VIRUS WHILE IN THEIR MOTHERS' WOMBS.

THESE FIGURES ARE HORRIFYING. BUT BEYOND ALL THESE COLD STATISTICS ARE REAL LIVE HUMAN BEINGS. PEOPLE IN FEAR. PEOPLE IN PAIN. PEOPLE WHO ARE MEASURING THEIR FUTURES IN WEEKS OR MONTHS. PEOPLE WHO DESERVE MUCH MORE THAN JUST OUR SYMPATHY. PEOPLE WHO DEMAND A REASON TO HOPE.

THE AIDS EPIDEMIC BEGAN IN THE UNITED STATES MORE THAN SIX YEARS AGO. YET, AS A NATION, ONLY RECENTLY HAVE WE BEGUN TO MOBILIZE OUR EFFORTS TO FIGHT THIS TRAGIC DISEASE. ENDING THIS TRAGEDY AS RAPIDLY AS POSSIBLE REQUIRES THE DEVELOPMENT OF A NATIONAL CAMPAIGN TO COMBAT AIDS THAT WILL HELP PREVENT FURTHER SPREAD OF INFECTION, PROMOTE THE RAPID DEVELOPMENT OF DRUGS AND VACCINES AGAINST AIDS, AND ENABLE ALL INDIVIDUALS WHO DEVELOP AIDS TO RECEIVE PROPER HEALTH CARE AND THE MOST EFFECTIVE TREATMENTS.

THE LEGISLATION WE ARE INTRODUCING TODAY REPRESENTS A FIRST STEP IN THE RIGHT DIRECTION. OUR BILL HAS FOUR MAJOR COMPONENTS:

FIRST, OUR BILL CALLS FOR A COMPREHENSIVE NATIONAL PLAN OF EDUCATION, PREVENTION, AND RISK REDUCTION. CURRENTLY, EDUCATION AND INFORMATION EFFORTS WITH RESPECT TO RISK FACTORS ASSOCIATED WITH THE DISEASE ARE THE ONLY TOOLS AVAILABLE TO LIMIT THE SPREAD OF AIDS. OUR EDUCATION AND PREVENTION EFFORTS MUST BE TARGETED AT THOSE INDIVIDUALS IN THE HIGH RISK CATEGORIES, INCLUDING GAY AND BISEXUAL MEN, INTRAVENOUS DRUG USERS, BLACKS AND HISPANICS, ADOLESCENTS, AND WOMEN OF CHILD-BEARING AGE.

SECOND, THE BILL WILL FACILITATE THE DEVELOPMENT OF CARE AND TREATMENT NETWORKS FOR PEOPLE WITH AIDS THAT ARE MORE ECONOMICAL AND APPROPRIATE THAN THOSE NOW AVAILABLE. WE MUST ESTABLISH COST-EFFECTIVE NETWORKS OF OUTPATIENT MEDICAL SERVICES FOR AIDS PATIENTS, INCLUDING COMMUNITY-BASED AND HOME CARE SERVICES AS ALTERNATIVES TO LONG-TERM HOSPITALIZATION.

THIRD, OUR BILL WILL ACCELERATE THE SEARCH FOR AIDS VACCINES AND CURES BY PUTTING FEDERAL FUNDS TO WORK FASTER. THE ULTIMATE ANSWER TO THE AIDS CRISIS MUST BE PROVIDED THROUGH RESEARCH. THEREFORE, WE PROPOSE AN IMMEDIATE EFFORT TO STREAMLINE THE PROCEDURES FOR GETTING FEDERAL FUNDS INTO RESEARCH FACILITIES. OUR BILL ALSO PROVIDES RESOURCES TO TRAIN MORE RESEARCHERS, AND IT CREATES A NETWORK OF AIDS RESEARCH CENTERS ACROSS THE COUNTRY.

FINALLY, THE BILL ADDRESSES THE ISSUE OF CONFIDENTIAL AIDS TESTING, COUNSELING, AND ANTI-DISCRIMINATION. THE LEGISLATION EXPANDS VOLUNTARY TESTING PROGRAMS AND ENCOURAGES INDIVIDUALS AT HIGH RISK FOR INFECTION TO PARTICIPATE BY GUARANTEEING CONFIDENTIALITY AND PROHIBITING DISCRIMINATION.

WITHOUT A NATIONAL CAMPAIGN AGAINST AIDS, THE PROSPECTS FOR QUICKLY AND EFFECTIVELY ARRESTING THE ONSLAUGHT OF AIDS ARE BLEAK. THIS BILL CAN HELP US MEET THE CHALLENGE WITH SERIOUSNESS,RATIONALITY, DIGNITY, AND HOPE.

I COMMEND THE CHAIRMAN OF THE LABOR AND HUMAN RESOURCES COMMITTEE, SENATOR KENNEDY, FOR HIS LEADERSHIP ON THIS PUBLIC HEALTH ISSUE OF CRITICAL IMPORTANCE TO OUR COUNTRY.

The CHAIRMAN. We have a full afternoon here. We want to welcome all of our witnesses. We appreciate their special efforts in both being here and also being available for comments earlier this afternoon, at the press conference.

We will start out with Dr. Robert Redfield, of the Department of Infectious Diseases, Walter Reed Army Hospital.

We are delighted to welcome you to the Committee, and we look forward to your testimony.

STATEMENT OF DR. ROBERT R. REDFIELD, DEPARTMENT OF VIRUS DISEASE, WALTER REED ARMY INSTITUTE OF RESEARCH, WASHINGTON, DC

Dr. REDFIELD. Thank you very much.

I appreciate the opportunity to share my perspective of the AIDS epidemic with this Committee. The views presented here are my own and do not purport to reflect the position of the Department of the Army of the Department of Defense.

My perspective of the AIDS epidemic is a product of the opportunity that I have had to practice medicine as a military physician at Walter Reed Army Medical Center.

As a physician, a scientist, and a military medical officer concerned with public health, I have been placed in a unique position to comprehend the magnitude of the problem that the AIDS virus is causing and will continue to cause our Nation.

Our society has no recent experience with a deadly epidemic and so lacks a context within to respond to one. Of all the epidemics in the past, I feel that syphilis most closely mimics our current situation. Syphilis did not emerge gradually into the records of medicine, but appeared with a dramatic suddenness at the end of the Fifteenth Century, sweeping within a few years over the known world. Physicians found nothing in Hippocrates or Galenic philosophy that seemed to resemble this great plague. Original theories presented by the respected scientists of the time attributed the cause to astrological occurrences. Society responded with social and legal interventions based on mystery.

Initially, syphilis was confronted with an attitude of fear and helplessness. However, over the next several centuries, this attitude evolved into the acceptance of the ravages of syphilis as part of life.

Over 400 years elapsed, but gradually through scientific approaches, the etiology of syphilis was determined, the methods of transmission ascertained, and a reliable diagnostic test was developed. This knowledge was used by society to develop a national strategy to control the epidemic and by scientists to develop effective and curative treatment.

First recognized in 1981, AIDS was a new and mysterious syndrome. Yet today, AIDS is no longer a mystery. It is an infectious disease caused by a retrovirus. Within three short years, science has identified the etiology, defined the methods of transmission, and developed an accurate diagnostic test of the AIDS virus infection. Yet despite these advances, the AIDS epidemic has escalated from a medical curiosity to a national crisis of potential catastrophic proportions.

Why? Unfortunately, the original case definition of AIDS only identified late clinical cases of the disease, and thereby severely underrepresented the magnitude of the epidemic from the beginning.

Although early studies reported progression rates of seropositive individuals to AIDS of only 5 to 10 percent, many cohort studies available now demonstrate progression to AIDS in excess of 30 percent. Our own cohort study demonstrates that greater than 75 percent of patients followed for greater than two years have demonstrated progressive immunological disease.

Initially, our understanding of the epidemiology of AIDS was also incomplete. Today scientific investigations have unequivocally documented the following modes of transmission: efficient bidirectional sexual transmission, male to male, male to female, and female to male, parenteral transmission, and perinatal transmission. Yet it is the sexual transmission that is the major mode of HIV transmission.

Personally, I was forced to confront the grim reality of heterosexual transmission in late 1983. Over 50 percent of the original 45 patients with symptomatic HIV infection seen at Walter Reed were married. Routine medical evaluations of the patients' asymptomatic spouses demonstrated that nearly 50 percent of these spouses were also infected.

Patient-spouse pair evaluations continue to document the importance of heterosexual transmission. For example, 12 of the 27 wives married to men with symptomatic retroviral infection were also infected; whereas three of the seven men married to women with transfusion-related AIDS were also infected.

The CHAIRMAN. Excuse me. That means half of the spouses were infected as well, from your research.

Dr. REDFIELD. That is correct, Senator.

The CHAIRMAN. That is true either way?

Dr. REDFIELD. In the women that had transfusion-related AIDS, there were seven of them whose husbands had no other risk than having recurrent sexual activity with a woman with transfusion-related AIDS, and three were infected; and in the other direction, it was 12 of the 27.

Many other U.S. investigators have demonstrated bidirectional heterosexual transmission now; however, none more convincingly than the study by Dr. Fischl at the University of Miami. In a prospective study of AIDS patient-uninfected spouse pairs, she documented the equivalent ability of the AIDS virus to be transmitted from a man to a woman and a woman to a man. Most notably, 13 out of 16 couples who continued to engage in unprotected intercourse infected their partners.

These studies highlight the grim reality that bidirectional heterosexual transmission is a highly efficient mode of transmitting the AIDS virus.

We now appreciate the prolonged asymptomatic period of the AIDS virus and understand that the epidemiology of AIDS in 1987 merely provides us an historical perspective of HIV transmission patterns that occurred nearly a decade ago. Today's AIDS cases represent an historical account of the magnitude of the epidemic in front of us in the late Seventies.

Likewise, risk group categorization continues to focus on the past, placing the major emphasis on how one became infected, as opposed toward the future by placing the emphasis on how individual patients infected others.

I feel it is critically important that we change our focus from AIDS and the problem in the late Seventies towards the virus and the problem now in 1987.

It is with pride as a military physician that I reflect on the approach that the leadership of the Department of Defense has executed in response to the AIDS epidemic. HIV infection has been confronted by the military as the important medical and military problem that it is; the DOD policies have been guided by science coupled with important medical and public health issues.

It is also with pride as a military researcher that I reflect on the foresight that the leadership of the Department of Defense exhibited when they developed a system to collect the operational HIV screening data, thus enabling the Department of Defense to provide critically needed information about the extent of the AIDS virus infection in our Nation's young sexually active people.

One of the DOD screening programs providing extremely valuable data is the civilian applicant screening program. Between October 1985 and December 1986, over 750,000 individuals were tested for the presence of antibody to HIV. The overall prevalence of HIV infection was 1.5 per 1,000.

To put this in proper perspective, one should recall that in 1975, less than one per 1,000 homosexual males in San Francisco were infected with the AIDS virus, yet by 1985, over 500 per 1,000 had become infected.

In light of the demonstrated efficiency of the heterosexual transmission of HIV, the fact that already 1.5 per 1,000 of the American youth desiring to serve their country in the armed forces are infected with this deadly sexually-transmitted disease——

The CHAIRMAN. Give me that again. Are you talking now about the ones that are tested when they come into the military?

Dr. REDFIELD. That is correct, Senator.

The CHAIRMAN. And you are getting what percent?

Dr. REDFIELD. 1.5 per 1,000. And I was trying to put it in perspective to where the epidemic was in the gay community.

The CHAIRMAN. Well, what is that projected in the 18 to 20 year-old population?

Dr. REDFIELD. Well, it is clearly not a totally random sample of individuals across the country in that age group. But in the group between 17 and 20 that elected to apply for the service, the overall prevalence of infection was .5 per 1,000, or one in 2,000.

But by the time the individuals were 21 to 25, it had jumped to about 2.4 per 1,000, and by the time the individuals that applied were 26 to 30, it had jumped to about 4.4 per 1,000, approaching half a percent.

The CHAIRMAN. Can you extrapolate what that means in terms of the population generally, nationwide? What would that mean in terms of the numbers of people——

Dr. REDFIELD. I really cannot extrapolate to the general population totally, other than I think my own personal bias is that the military recruiting data in itself selects against some of the more

traditional risk factors for HIV infection and I would say that there are factors that weigh the prevalence rate that could be higher or lower.

But I cannot give you from the cross-sectional of survey the number of the infections in our Nation today.

I think it is of particular interest that among the 17 to 20 year-olds, that the female to male ratio of infection was 1.6 to 1 of the young civilian applicants. The prevalence rates also varied by geographical locale.

The CHAIRMAN. What you are saying, therefore, is that the variance in terms of the male-female is not great in terms of the younger people; is that correct?

Dr. REDFIELD. That is correct. It is about 1.6 to 1. Overall in the entire program, the male-female ratio was 2.6 to 1, which is in sharp contrast to the AIDS cases reported to date, which the ratio is about 13 to 1.

So again this group suggests that being a man or a woman provides much less predictability about whether you are infected in the young people applying for the service.

The prevalence rate for New York State, for example, was approximately 4.1 per 1,000, approaching half a percent; for Maryland, 3.7 per 1,000; and for New Jersey, about 3.3 per 1,000.

In addition, the metropolitan areas of New York City, Newark, San Francisco, and the District of Columbia all included counties where the prevalence rate was greater than one percent of HIV infection in both male and female applicants where the male-female ratio actually almost approached one.

The CHAIRMAN. I am sorry. We have our other colleagues here, and we want to complete the testimony, but if at any time you wish to inquire of our witnesses, we hope you will involve yourselves.

Let me ask you, Dr. Redfield, before leaving that thought, have the numbers you are getting changed in terms of the testing for young men and women? You gave us the figures about the numbers that were at risk. How long has the service been testing?

Dr. REDFIELD. Since October 1985.

The CHAIRMAN. I see. And was there any change between October 1985 and, say, October 1986?

Dr. REDFIELD. In the overall prevalence as a group as a whole, there has not been a significant change. The overall prevalence rate remains 1.5 per 1,000, 1.6 per 1,000 for male applicants, and .6 per 1,000 for female applicants. But in some of the subgroups there has been a significant change, say, between October 1985 and October 1986.

For example, if we were to look at black males that were born in the years 1962 to 1967, there was actually a significant increase if they elected to join the service in the fall of 1985 versus the fall of 1986. But as to the group as a whole, there was no change.

For example, if we look at the prevalence of infection now in an area like Manhattan, approximately 2 percent of male applicants were infected with the AIDS virus, and approximately 1.7 percent of all the female applicants were infected with the AIDS virus.

In addition, in the New York Metropolitan Area, no longer were gender or race a predictor of whether or not you were infected. The

only significant predictor was now your age, such that individuals between the ages of 18 and 21 had a prevalence rate of 3 per 1,000 for males and 3.8 per 1,000 for females, and for individuals between the ages of 22 and 25, the rate was 1.3 percent for males and 1.4 percent for females.

And it was not until we got over the age of 26 that the rate was 3.4 percent of all male applicants from New York City were infected with the AIDS virus, and 1.3 percent of female applicants.

These data demonstrate that a substantial proportion of the youth of some of America's greatest cities are already infected with the AIDS virus and capable of unknowingly transmitting this deadly virus to others.

In closing, it is my opinion that the AIDS virus is no longer an isolated public health problem. It has escalated to a national problem, capable of affecting all Government departments and altering our society and the world as we know it today.

It is my belief that today, AIDS is our Nation's number one problem. We must recognize it as such now, despite the fact that the ultimate impact of today's problem will not be upon us for five to ten years.

The difficulty as I see it is that some Americans will not be able to foresee the grim reality of the next decade, and they will only understand when forced to confront human suffering in the flesh. We must provide vision of the future so that we will have the necessary resolve to fully respond as a Nation now.

We know enough now to limit the impact that this virus will have on us, our children, and our Nation. Yet we have been slow to take charge and accept the responsibility to challenge this virus with the vigor and commitment that has made our Nation so great.

Public health is a responsibility of Government, and cooperation to maintain public health is a responsibility of each of its citizens. In any infectious disease, knowledge of the infection is paramount to control.

I would hope that soon, every sexually-active citizen will have the same opportunities provided the members of the armed forces, that is, the opportunity to no longer unknowingly transmit this deadly virus to another human being, coupled with the opportunity to be informed if they had been unknowingly exposed to this virus.

We must define and remove the obstacles of knowledge of this infection and we must aggressively promote routine testing with voluntary exclusion.

Vigorous leadership coupled with accurate education and classical public health measures will limit the spread of this deadly virus. But first, we as a Nation must recognize the AIDS virus as the national crisis that it is. Then, we must have the courage to develop an effective national policy and the resolution to mobilize the resources necessary to implement our national program.

The opportunity to combat the AIDS virus is now.

[The prepared statement of Dr. Redfield follows:]

Testimony provided to United States Senate Committee on Labor and Human Resourses 15 May 1987

Robert R. Redfield MD

I appreciate this opportunity to share my perspective of the AIDS epidemic with this committee. The views presented here are my own and do not purport to reflect the position of the Department of the Army or the Department of Defense.

My perspective on the AIDS epidemic is the product of the opportunity that I have had to practice medicine and perform applied research as a military physician at Walter Reed Army Medical Center over the past 4 years.

As a physician, scientist and military medical officer concerned with public health, I have been placed in a unique position to comprehend the magnitude of the problem that the AIDS virus is causing and will continue to cause our Nation.

Our society has no recent experience with a deadly epidemic and so lacks a context within to respond to one. Of all the epidemics in the past, syphilis most closely mimics our current situation. Syphilis did not emerge gradually in the records of medicine but appeared with a dramatic suddenness at the end of the Fifteenth Century, sweeping within a few years over the known world. Physicians found nothing in

Hippocrates or Galenic philosophy which seemed to resemble this great plaque. Original theories presented by the respected scientists of the time attributed the cause to a recent astrological occurrence. Society responded with social and legal interventions based on mystery. Initially, syphilis was confronted by an attitude of fear and helplessness. However, over the next several centuries this attitude evolved into the acceptance of the ravages of syphilis as part of life. Over 400 years elapsed, but gradually through scientific approaches, the etiology of syphilis was determined, the methods transmission ascertained, and a reliable diagnostic test developed. This knowledge was used by society to develop a national strategy to control the epidemic and by scientists to develop effective and curative treatment.

First recognized in 1981, AIDS was a new and mysterious syndrome. Yet today, AIDS is no longer a mystery. It is an infectious disease caused by a retrovirus, HIV. Within 3 years, science had identified the etiology, defined the methods of transmission, and developed accurate diagnotic tests of the AIDS virus infection. Yet despite these advances, the AIDS epidemic has escalated from a medical curiosity, to an isolated public health problem, to a National crisis of potential catastrophic proportion.

WHY? Unfortunately the original case definition of AIDS identified only the late clinical stages of the disease, and

thereby severely underrepresented the magnitude of the epidemic from the beginning.

Although early studies reported progression rates of seropositive individuals to AIDS of only 5-10%, the natural history of the AIDS virus from infection to the development of end stage disease in man has been clarified. This virus infection results in a slow chronic progressive disease, requiring 5-10 years (or more) to cause death. Many cohort studies available today demonstrate progression rates to AIDS in excess of 30%. Our own cohort study demonstrates that greater than 75% of patients followed for greater than 2 years has demonstrated progressive immunological disease at accessed by the Walter Reed Staging Scheme.

Initially, our understanding of the epidemiology of AIDS was also incomplete. Today scientific investigations have unequivocally documented the following modes of transmission: efficient bidirectional sexual transmission (male to male, male to female and female to male); parenteral transmission (blood and blood products, and sharing drug paraphernalia) and perinatal transmission. Sexual transmission is the major mode of HIV transmission. Personally, I was forced to confront the grim reality of heterosexual HIV transmission in late 1983/ early 1984. Over 50% of the original 45 patients with symptomatic HIV infection seen at Walter Reed were married. Routine medical evaluation of the patients asymptomatic spouses demonstrated

that nearly 50% were also infected. Patient - spouse pair evaluations continue to document the importance of heterosexual transmission. For example, 12 of the 27 wives married to men with symptomatic retroviral infection were also infected; whereas, 3 of the 7 men married to women with transfusion related AIDS were also infected. Many other US investigators have confirmed the occurrence of bidirectional heterosexual transmission; however, none more convincingly then Dr. Fishel of the University of Miami. In a prospective study of AIDS patient - uninfected spouse pairs, she documented the equivalent ability of the AIDS virus to be transmitted from a man to a women and from women to a man (11/27 women married to men with AIDS and 4/9 men married to women with AIDS became infected during the 6-18 month followup period). Notably 13/16 couples who continued to engaged in unprotected intercourse, infected their partners. These studies highlight the grim reality that bidirectional heterosexual transmission is a highly efficient mode of transmitting the AIDS virus.

We now appreciate the prolonged asymptomatic period of the AIDS virus infection and understand that the epidemiology of AIDS in 1987 merely provides a historical perspective of HIV tranmission patterns which occurred nearly a decade ago. Todays AIDS cases represents a historical account of the magnitude of this epidemic in the late 1970's. Likewise, risk group categorization continues to focus on the past

placing the major emphasis on how one became infected, as oppose toward the future by placing the emphasis on how the patient infected others (ie contacting individuals exposed by the infected individuals).

It is critical that we change our focus from AIDS and the problem in the late 1970's towards the virus and the problem now in 1987. Serological studies of the prevalence of HIV infection have been almost exclusively confined to traditional "high risk" groups. One exception is the American Red Cross blood screening data which demonstrates a rate of 2-4 per 10,000. The limitation of all these studies is that none reflects the current status of HIV infection among the general population of sexually active young people.

It is with pride as a military physician, that I reflect on the approach that the leadership of the Department of Defense has executed in response to the AIDS epidemic. HIV infection has been confronted by the military as the important medical and military problem that it is; the DOD policy has been guided by science coupled with important medical and public health issues. It is also with pride as a military researcher, that I reflect on the foresight that the leadership of the Department of Defense exhibited when they developed a system to collect the operational HIV screening data, thus enabling DOD to provide critically

needed information as to the extend of the AIDS virus infection in our Nation's young sexually active people.

One DOD screening program providing extremely valuable data is the civilian applicant screening program. All civilian applicants for the Armed Forces must undergo a medical examination with includes along with other medical test screening for the AIDS virus as part of the medical evaluation for fittness for military service. Between October 1985 and December 1986 over 750,000 individuals were tested for presence of antibody to HIV. The overall prevalence of HIV infection was 1.5 per 1000. To put this in the proper prespective, one should recall that in 1975 less than 1 per 1000 homosexual males in San Francisco were infected with the AIDS virus, yet by 1985 over 500/1000 had become infected. In light of the demonstrated efficiency of the heterosexual transmission of HIV, the fact that already 1.5/1000 of the American youth desiring to serve their country in the Armed Forces are infected with this deadly sexually transmitted disease is a tragedy. The prevalence for males was 1.6/1000 and among females 0.6/1000, for a male female ratio of 2.5 to 1. This ratio is in sharp contrast to the male to female ratio of 13 to 1 of reported AIDS cases. HIV prevalence increased almost linearly with age from 0.5/1000 for 17-20 years olds, to 2.4/1000 for 21-25 year olds, to 4.4/1000 for 26-30 years olds, and 3.8/1000 for applicants over the age of 30. It is of

interest that among 17-20 years, the male to female ratio was 1.6 to 1 (0.5/1000 for males and 0.3/1000 for females). Prevalence rates also varied by geographic locale. For example, New York State had a prevalence of 4.2/1000, Maryland 3.7/1000, New Jersy 3.3/1000, Delaware 2.3/1000, California 2.1/1000, Florida 2.0/1000, and Texas 1.8/1000. In addition, the metropolian areas of New York City, Newark, San Francisco and Washinton DC, all included counties with prevalence rates of greater than 1%. in both male and female applicants with a male to female ratio of approaching 1 to 1. For example, in Manhattan the male and female prevalence was 2.0% and 1.7% respectively. In addition, in these metropolian areas such as NYC, gender and race were no longer predictors of HIV infection; however, age was. Individuals 18-21 had prevalence rate of ~~3.0~~ 3.0/1000 for males and ~~3.8~~ 3.3/1000 for female; for applicants 22-25 the rate was 1.3% for males and 1.4% for females; and for individuals 26 or older, the rate was 3.4% for males and 1.3% for females. These data demonstrate that a substantial proportion of the youth in some of America's greatest cities are already infected with the AIDS virus and capable of unknowingly transmitting to this deadly virus to others.

In closing, it is my opinion that the AIDS virus is no longer an isolated pulbic health problem. It has escalated to a National problem capable of affecting all governmental departments and altering our society and the World as we know it today. Today AIDS is our Nation's number one

problem. We must recognize it as such, now, despite the fact that the ultimate impact of today's problem will not be upon us for 5-10 years. The difficulty, as I see it, is that some Americans cannot foresee the grim reality of the next decade. They will only understand when forced to confront human suffering in the flesh. We must provide the vision of the future, so we have the necessary resolve to respond fully as a Nation now.

We know enough now to limit the impact that this virus will have on us, our children and our Nation. Yet we have been slow to take charge and accept our responsibility to challenge this virus with the vigor and committment that has made our Nation so great. Public health is a responsibility of government and cooperation to maintain public health is the responsibity of each citizen. In any infectious disease, knowledge of the infection is paramount in its control. I would hope that soon every sexually active citizen would have the same opportunities provided the members of the Armed Forces, the opportunity to no longer unknowingly transmit this deadly virus to another human being, coupled with the opportunity to be informed if they have been unknowingly exposed to this virus. We must define and remove the obstacles of knowledge of this infection and we must aggressively promote routine testing. Vigorous leadership coupled with accurate education and classical public health measures will limit the spread of this deadly virus in our Nation. But first, we must, as a Nation

recognize the AIDS virus as the national crisis that it is. Then we must have the courage to develop an effective national policy and the resolution to mobilize the resources necessary to implement our national program. The opportunity to combat this virus is NOW.

The CHAIRMAN. Thank you very much, Doctor.

We read this morning in the Washington Post a report about the extent of transmission or increase or lack of increase, or slowing down of the increase. Can you comment on that report?

Dr. REDFIELD. Well, there is a recent report published in the MMWR, which really reflects some of the data that I presented in terms of an update of the military civilian entrance applicants from October 1985 to December of 1986. And if you look at individuals across-the-board, the overall prevalence rate has not changed. It was 1.5 per 1,000 in the first six months of the program; it is 1.5 per 1,000 in the last six months of the program.

One of the conclusions there is that the epidemic is stable.

From my perspective as a physician, I look at it that about 500,000 out of every 800,000 applicants happen to be individuals between the age of 17 and 18 years of age. And I kind of look at it if I had a bucket of water, and I put two drops of red dye in it, the water would turn pink. And if I turn on a hose of clear water, and the bucket stayed the same color of pink, I would not necessarily conclude that that is a stable epidemic.

And as I said, as we begin to look by birth year cohorts for individuals, for example, that were born in the year 1967 and elected to join the service in the fall of 1985, the overall prevalence rate was one in 2,000; but if they waited and joined the service in the fall of 1986, the prevalence rate was now one in 1,000, suggesting that the epidemic is not static.

So I think that the jury is not out whether or not there is no change—some interpret that to mean that the epidemic is stable. I, in looking at sub-sub populations, come to the conclusion that the epidemic is not stable.

The CHAIRMAN. Senator Thurmond?

Senator THURMOND. Thank you, Mr. Chairman.

Mr. Chairman, I have a short statement, and I might make that first. I have been tied up in another committee.

President Reagan has recently declared that AIDS is the number one public health problem of this Nation. Do you feel that way about it, Doctor?

Dr. REDFIELD. I think that the AIDS epidemic is the number one national problem. I do not think it is just the number one public health problem. So I agree that it is the number one public health problem, but I think it actually is the number one national problem. So I escalate it above just being a public health problem.

Senator THURMOND. So you consider it the number one national problem.

More than 33,000 cases, according to figures I have, of AIDS have been reported in the United States, and over 19,000 have died from the disease since it was reported in 1981. Is that about right?

Dr. REDFIELD. That is correct.

Senator THURMOND. At least 1.5 million Americans have been infected with the virus, and AIDS has become the tenth leading cause of death in this country. That is according to the figures I have. Is that correct?

Dr. REDFIELD. That is correct to my knowledge.

Senator THURMOND. The Surgeon General, Dr. C. Everett Koop, has issued a report, and his concluding paragraph reads this way:

"AIDS is a life-threatening disease and a major public health issue. Its impact on our society is and will continue to be devastating. By the end of 1991, an estimated 270,000 cases of AIDS will have occurred, with 179,000 deaths within the decade since the disease was first recognized. In the year 1991, an estimated 145,000 patients with AIDS will need health and supportive services at a total cost of between $8 and $16 billion. However, AIDS is preventable. It can be controlled by changes in personal behavior. It is the responsibility of every citizen to be informed about AIDS and to exercise the appropriate preventive measures. The spread of AIDS can and must be stopped."

I guess you would be in accord generally with that statement, wouldn't you?

Dr. REDFIELD. I am in agreement with the statement in general. One of the messages, though, that I think is critically important in being able to use all the knowledge available to us to limit this epidemic is not only let people understand how the virus is transmitted, but I am of the position that personal knowledge of whether or not you are infected, or whether or not your sexual partner is infected, is really critical if we are going to ultimately have a major impact on controlling the AIDS virus epidemic in our country.

Senator THURMOND. Mr. Chairman, the Senate recently passed a Resolution which calls for a Presidential commission to assist the President and Congress in establishing priorities and a comprehensive plan to deal with all aspects of the problem of AIDS. Members of the commission would include representatives from a broad range of groups and industries involved in efforts to address this serious matter. This commission is to be established within 90 days and issue a report within nine months.

I was pleased to be an original cosponsor of that Resolution, and I anticipate this commission will have some valuable recommendations to make.

I presume you think that would be helpful, Doctor?

Dr. REDFIELD. Sir, I think it would be very helpful.

Senator THURMOND. Mr. Chairman, I understand that you will today introduce a measure to combat AIDS. I intend to study this bill carefully and look forward to working with the Chairman in solving this serious public health hazard.

I cannot be here for the full hearing, but I will be interested in reading the testimony, because I think this is a very important matter to this Nation.

[The prepared statement of Senator Thurmond follows:]

STATEMENT BY SENATOR STROM THURMOND (R.-S.C.) SENATE LABOR AND HUMAN RESOURCES COMMITTEE HEARINGS ON AIDS. SD-430, 2:00 P.M.

MR. CHAIRMAN:

PRESIDENT REAGAN HAS RECENTLY DECLARED THAT AIDS IS THE NUMBER ONE PUBLIC HEALTH PROBLEM OF THIS NATION.

THE FACTS BEAR THIS OUT. MORE THAN 33,000 CASES OF AIDS HAVE BEEN REPORTED IN THE UNITED STATES, AND OVER 19,000 HAVE DIED FROM THE DISEASE SINCE IT WAS FIRST REPORTED IN 1981. AT LEAST 1.5 MILLION AMERICANS HAVE BEEN INFECTED WITH THE VIRUS, AND AIDS HAS BECOME THE TENTH LEADING CAUSE OF DEATH IN THIS COUNTRY.

MR. CHAIRMAN, THE SURGEON GENERAL, C. EVERETT KOOP, HAS ISSUED A REPORT ON AIDS. THE CONCLUDING PARAGRAPH OF HIS FINDINGS STATES:

> AIDS IS A LIFE-THREATENING DISEASE AND A MAJOR PUBLIC HEALTH ISSUE. ITS IMPACT ON OUR SOCIETY IS AND WILL CONTINUE TO BE DEVASTATING. BY THE END OF 1991, AN ESTIMATED 270,000 CASES OF AIDS WILL HAVE OCCURRED WITH 179,000 DEATHS WITHIN THE DECADE SINCE THE DISEASE WAS FIRST RECOGNIZED. IN THE YEAR 1991, AN ESTIMATED 145,000 PATIENTS WITH AIDS WILL NEED HEALTH AND SUPPORTIVE SERVICES AT A TOTAL COST OF BETWEEN $8 AND $16 BILLION. HOWEVER, AIDS IS PREVENTABLE. IT CAN BE CONTROLLED BY CHANGES IN PERSONAL BEHAVIOR. IT IS THE RESPONSIBILITY OF EVERY CITIZEN TO BE INFORMED ABOUT AIDS AND TO EXERCISE THE APPROPRIATE PREVENTIVE MEASURES....
>
> THE SPREAD OF AIDS CAN AND MUST BE STOPPED.

MR. CHAIRMAN, THE SENATE RECENTLY PASSED A RESOLUTION WHICH CALLS FOR A PRESIDENTIAL COMMISSION TO ASSIST THE PRESIDENT AND CONGRESS IN ESTABLISHING PRIORITIES AND A COMPREHENSIVE PLAN TO DEAL WITH ALL ASPECTS OF THE PROBLEM OF AIDS. MEMBERS OF THE COMMISSION WILL INCLUDE REPRESENTATIVES FROM A BROAD RANGE OF GROUPS AND INDUSTRIES INVOLVED IN EFFORTS TO ADDRESS THIS SERIOUS MATTER. THIS COMMISSION IS TO BE ESTABLISHED WITHIN 90 DAYS AND

ISSUE A REPORT WITHIN 9 MONTHS. I WAS PLEASED TO BE AN ORIGINAL COSPONSOR OF THAT RESOLUTION, AND I ANTICIPATE THIS COMMISSION WILL HAVE SOME VALUABLE RECOMMENDATIONS.

MR. CHAIRMAN, I UNDERSTAND THAT YOU WILL TODAY INTRODUCED A MEASURE TO COMBAT AIDS. I INTEND TO STUDY THIS BILL CAREFULLY, AND LOOK FORWARD TO WORKING WITH THE CHAIRMAN IN SOLVING THIS SERIOUS PUBLIC HEALTH HAZARD.

MR. CHAIRMAN, WHILE MY SCHEDULE MAY NOT PERMIT ME TO STAY FOR THE ENTIRE HEARING, I LOOK FORWARD TO REVIEWING THE TESTIMONY OF THE WITNESSES TODAY.

Senator THURMOND. Let me ask you a question, Dr. Redfield. I understand that the FDA has never approved condoms as a birth control device because they are considered unreliable. How effective do you feel they are in preventing AIDS?

Dr. REDFIELD. Well, I think that there is clear evidence, for example, in the study that was performed by Dr. Fischl here, that individuals that did not use protective measures all the time that were exposed to someone with AIDS, 13 out of 16 became infected, for about 81 percent; whereas those that wore barrier protection or condoms, it was reduced to initially, I think it was 2 out of 12. So clearly, it reduced the risk of transmission in that one study from 81 percent to 2 out of 12, or 17 percent.

I think, though, that we should not expect condoms to be more effective in limiting the transmission of the AIDS virus than they are in preventing pregnancy. And in the studies that have been done to look at the efficacy of condoms in pregnancy prevention, there basically is a failure rate of around 8 to 13 percent.

Many may want to attribute that to improper use of condoms, but I can attest to you that condoms fail among people that know how to use them very well. And so I think if we begin to over-relax and say that condoms are the answer to the AIDS control epidemic, that just is not true, I think that is not true.

Senator THURMOND. In other words, if you put too much confidence in condoms, you think it would be a mistake, although the record so far shows that they have been helpful in preventing pregnancy and AIDS, too; is that correct?

Dr. REDFIELD. That is correct. My point of view would be that the most important thing to inhibit your ability from coming in contact with the AIDS virus would be to know whether your sexual partner was infected or not.

In the absence of that knowledge, I think the use of condoms clearly reduces the risk of transmission and should be easily available and promoted, but they should be promoted not as a failsafe method to prevent AIDS transmission, but they should be promoted as a mechanism to reduce the risk of transmission of a deadly virus, but the failure rate may be as high as 5 or 10 percent. I think people need to know that very clearly.

Senator THURMOND. Doctor, if you were in Congress today, what would you recommend to be done to handle the AIDS question from a national standpoint?

Dr. REDFIELD. I think from my perspective at this point, I think the most critical thing we need right now is national leadership, whether that is at the Congressional level or the Executive level. Coupled with that, I think that we need to basically promote very accurate education about how this disease is transmitted, and part of what we promote, I think we need to promote to young people in this country that they want to, and it is their responsibility to know, whether or not they are infected with this virus or their partners are infected; and that the true educational message that we are trying to teach is that it is smart to get the AIDS test and know if you are infected or not, and your partner is not.

So what we need to do at the national here is remove those major obstacles to testing. And as I see the major obstacles to testing, the first one is we need to promote it as being the most appro-

priate public health and medical measure to deal with this epidemic, and following promoting it as such, we need to remove the concern about discrimination by passing some Federal legislation that will protect individuals with the AIDS virus from inappropriate, or from discrimination at all. We need to provide some type of national health insurance for individuals infected with the AIDS virus, so that the concern of losing health insurance is no longer a deterrent. And we need to provide free or inexpensive easy access to testing, both anonymously for individuals that want it anonymously, but also non-anonymously for individuals who just want to do it. And we need to promote testing as a routine practice of medicine.

So if we did, really, those four things—the leadership; the promoting of testing and accurate education, coupled with removing the major obstacles by providing free standardized testing, anti-discrimination legislation at a Federal level, and some type of health insurance—the reality is, as I see it, this country is going to pay as a country for that 8.1 or $27 billion health care cost that you alluded to in 1991, that is going to be borne by all of us. So it seems to me to make more sense, if it is an obstacle to letting us control this epidemic optimally from a public health point of view, we ought to remove that obstacle.

Senator THURMOND. Mr. Chairman, I want to commend you for holding this hearing. I think it is on a very important subject.

I have just one more question I would like to propound to you, Dr. Redfield. You said you feel everyone who has been unknowingly exposed to AIDS has a right to know. Does that mean that you are in favor of contact tracing? If not, how are you going to let them know?

Dr. REDFIELD. Yes, I am clearly a proponent of providing the traditional public health measures to control this epidemic. I think one of the misnomers is that contact tracing is somehow a mandatory process. It is a voluntary process, and it was developed to be done with privacy. And the reason that contact tracing was done is to maintain the confidentiality of the individual who happens to be exposed to someone else, for that individual (i.e., maintain confidentiality).

For example, if I happen to have syphilis, my doctor would ask me if I had syphilis; he cannot force me to tell my contacts. He would tell me that he would be willing to notify my contacts or, if I do not want that because it is a family doctor, and I am not comfortable with him knowing my sexual past, he would refer me to the health department. The health department would not even know my name. They would know that I am number so-and-so, that I am here for a syphilis follow-up. I would name my contacts. My contacts would then be given a letter to come to the health department if they so wanted to, but they would at least be advised that they had been exposed to syphilis.

The way we do it now in our country, in many States, we strongly advocate that individuals notify the individuals that they have exposed. We consider that their moral obligation. And yet we want them to do it to protect their confidentiality. And I find that somewhat ironic. The reality is that the reason the public health community developed the confidential contact tracing or contact notifi-

cation method was so that I do not have to notify my contacts myself.

So clearly, I am in support of it. Clearly, I think it can be done, and it has been done with privacy in public health for years and years and years and years and years, and it needs to be continued to do so. We should fully endorse these traditional public health measures to begin to control the AIDS epidemic.

Senator THURMOND. It appears you make a very helpful suggestion.

Thank you very much, Doctor, and thank you, Mr. Chairman.

The CHAIRMAN. I want to just say how much I agree with the Doctor's underlining the importance of voluntary testing. We have now in many cities waits for nine weeks for testing. So I would invite my good friend and colleague from South Carolina to join me in adding some $27 million to the supplemental, which hopefully we will have in the next few days, to respond to the CDC request to reduce that waiting period for voluntary testing. It is very, very important.

I will not ask for a commitment on that today, Strom, but we will give you a chance to vote on it later.

Senator THURMOND. Well, there are some things we are together on.

The CHAIRMAN. That is right. And we both attended a very important ceremony today.

Senator THURMOND. You made a very fine address. I will congratulate you on that.

The CHAIRMAN. That is very nice. Thank you very much. [Laughter.]

This is just like our meeting the other night.

The Senator from Washington is recognized.

Senator ADAMS. I am glad that the storm is completed, and the calm is with us.

Mr. Chairman, I want to commend you for holding these hearings. I think they are excellent and important. And I will not make an opening statement at this time, because I have done so before when we joined in this legislation.

Doctor, I have just one question. I thought your testimony was excellent. But on page 3, I am not quite certain of your description of the rate of progression, and it may be that you do not know it yet from the number of years of examination you have had of it. But are you saying by this that everyone that is infected with the AIDS virus, or give me the percentage, if it is not everyone, moves to the final, late, clinical stages of the disease, which is a lack of an immune system, in a period of five to ten years?

Dr. REDFIELD. In our own studies, we have tried to look at this disease as six different stages. And to answer your question, I have a very good understanding of the Stage 6 disease, which is AIDS, and they progress basically to die. I have an understanding of the Stage 5 disease that they proceed to the Stage 6 disease, or death, within a defined period in our studies that we have done already; that the patients who have Stage 4 disease all become Stage 5 disease or Stage 6 disease, or die. And therefore, I feel I have a fairly good understanding of Stage 4 disease.

Stage 3 disease basically progresses to Stage 4 disease, Stage 5 disease, or Stage 6 disease, or death. So I feel I have a fairly good understanding of Stage 3 disease. And that is really when you see subclinical damage to the T-cells.

Stage 2 disease is what has been referred to as the "healthy adenopathy syndrome". In our own studies, 75 percent of those individuals have progressed to develop subclinical or clinical T-cell deficiency within the follow-up period even though they may not have gone on to develop AIDS.

So at this point, it is our best estimate that in the absence of a scientific solution and in the absence of effective therapy (and already there have been some advances for late-stage therapy, for example, with AZT, and I suspect we as clinicians will begin to develop therapy that will modify disease progression) but in the absence of that, I would predict that this virus will basically cause death in a period of, say, ten years, and probably clearly in excess of 75 percent, if not 90 percent, of individuals infected with this virus.

Senator ADAMS. It is just about as fatal as any plague we have ever had, then, isn't it?

Dr. REDFIELD. The only viral disease that I know of that probably has a higher mortality to date would of course be the rabies virus.

But I think we have dealt in medicine with many chronic diseases that we do not cure, and we need to put that in perspective. For example, if I have a myocardial infarction, then my five-year survival is not probably as good as my five-year survival is if I am an asymptomatic HIV-infected individual.

But the point is that the long-term prognosis of someone infected over ten years, in the absence of a scientific solution, is extremely poor I think that is one of the reasons this is such a terrible problem. This is a progressive, fatal infection in man.

Senator ADAMS. That is what I thought your testimony meant, which to me indicates that it is, as you say, a national problem, because if we have a progressive ten-year disease with a mortality rate that is 75 percent or above, we are dealing with the equivalent of a Black Plague, because there has to be an immediate cessation of the movement of the virus, because you are telling me at this point, once the virus has moved, your chances are less than 25 percent of survival.

Dr. REDFIELD. And I would also like to put it in perspective, though, sort of historically, that in 1938 or 1936, if my child had a simple peri-orbital cellulitis due to a bacteria, he had about a 90 percent mortality. And no one predicted in 1942 that that mortality would be changed to less than 5 percent with the advent of penicillin.

So in the absence of a scientific solution, I think we need to recognize and realize that this is a progressive infectious disease, and that makes this a very significant national crisis.

Senator ADAMS. That was the conclusion, Doctor, that I intended to state to you. I am hopeful, and that is why I am supportive, Mr. Chairman, of this bill and your efforts, is that without that type of solution, we already have an enormous pool of people infected, moving toward the progression of a very horrifying death; correct?

Dr. REDFIELD. Yes.

Senator ADAMS. I hope we pass the bill, Mr. Chairman. I appreciate the time.

The CHAIRMAN. Thank you very much.

The Senator from Iowa.

Senator HARKIN. Thank you, Mr. Chairman.

I have no questions. I apologize for getting here late. I would just like to ask unanimous consent that my opening statement be inserted in the record.

The CHAIRMAN. Yes, it will be included.

Senator HARKIN. I just want to say one thing from that, and I am sorry I will not be able to stay all afternoon for all of the witnesses, but I am pleased that we have with us an advocate for home care for those suffering from AIDS who will be testifying a little bit later, Dr. Ungvarski.

In many States urban hospitals are being overburdened with the care of these patients from large, surrounding areas. In addition, we know the cost of caring for them is just skyrocketing. In many cases, home care can be more humane and at the same time, much more cost-effective.

I just wanted to add that, Mr. Chairman, and I hope we do take a look at it. I support the legislation. I congratulate you for it. It is definitely a step in the right direction.

The CHAIRMAN. We appreciate the comments. There is a small amount, about $100 million, in that legislation that will include home care, and also for training community-based physicians. But we are really going to have to address that in the financing mechanisms that are available in both the public and private sectors, and I think all of us understand the overwhelming problem we are facing in long-term nursing care, home health care, and the rest. But we know this is of special interest to the Senator from Iowa, and we want to address it in the legislation. I hope we can make a downpayment on it, in any event, and build on it.

Senator HARKIN. Thank you very much, Mr. Chairman.

The CHAIRMAN. The Senator from Rhode Island?

Senator PELL. Thank you, Mr. Chairman.

I hope I might be made a cosponsor of this legislation.

The CHAIRMAN. Yes. It is so ordered.

Senator PELL. Thank you very much.

I read in the press, either yesterday or today, a report that the level of AIDS in the army has remained constant over a two-year period. What is the reason for that, because all the other indications are that the rate of infection is increasing?

Dr. REDFIELD. Senator, the data that you read was looking at the civilian applicants who are applying for the service that are screened on entry to the service, and the overall prevalence rate has not changed at 1.5 per 1,000.

Again, there are two different ways to interpret that data. Some individuals interpret that to mean the epidemic is stable; other individuals, like myself, looking at certain subpopulations, feel that the epidemic has continued to grow. And I think there is still some controversy on that point. I think it is premature to make any statement that the epidemic has stabilized in the young applicants to the service.

Senator PELL. One other question, and you may have answered it in your testimony. What percentage of the population now is infected with the AIDS virus?

Dr. REDFIELD. What percent have the virus today?

Senator PELL. Have the virus in them, yes.

Dr. REDFIELD. Well, in the general population, we really do not know the answer. We know what the blood donor pool is right now of people donating blood. It is about 2 to 4 per 10,000—actually, now it is down to a little less than 2.

Senator PELL. And of all those who have the virus in them, what percentage will acquire the disease?

Dr. REDFIELD. Our studies would suggest that it is in excess of 75 percent of individuals will progress. And as I said earlier, I suspect that actually it is higher, and it is probably going to be in excess of that, probably 90 percent or so, in the absence of a scientific solution.

Again, the natural history of this disease is such that is probably does take about eight, nine, or ten years from the time this virus infects us until we would develop the end-stage disease that we would recognize as opportunistic AIDS and die.

Senator PELL. Thank you very much.

The CHAIRMAN. Thank you very much. We appreciate it.

Dr. REDFIELD. Can I make one last comment?

The CHAIRMAN. Yes.

Dr. REDFIELD. I hear you allude to voluntary testing. Obviously, I have put forth the concept of routine testing with voluntary exclusion. And I think I would just like to emphasize that both of those methodologies are in fact voluntary.

One of my concerns about putting voluntary before testing is that it means that the individual has to be knowledgeable enough to perceive himself to be at risk for the AIDS virus to want to be tested. And I am concerned that as the epidemic continues, particularly in inner-city populations, there may be a number of individuals that do not perceive themselves to be at risk for this infection, and one of the ways to potentially avoid what I would consider possibly as discriminatory application would be to have routine testing, but preserve the right for anybody to voluntarily exclude themselves, and so it maintains—it really is a voluntary program.

I have heard the debate frequently, and I think sometimes people have said that the routine testing by definition is nonvoluntary, and in reality, it is voluntary.

The CHAIRMAN. Congressman Waxman and myself will be introducing legislation on the whole issue of testing within the next week. I will send you a copy of it and I would be very interested if you would take a moment and give us your reactions.

Dr. REDFIELD. Thank you very much, sir.

The CHAIRMAN. Thank you very much.

Our next witness is Dr. James O. Mason, Director of the Centers for Disease Control, a former Acting Assistant Secretary for Health, an outstanding scientist and a 25-year veteran of the CDC.

We have a full schedule, and we want to get all the testimony in. We want to hear from you, and then we will try and limit our own questions to a few minutes and see if we can continue on through the witnesses for the afternoon.

STATEMENT OF DR. JAMES O. MASON, DIRECTOR, CENTERS FOR DISEASE CONTROL, ATLANTA, GA

Dr. MASON. Mr. Chairman, members of the Committee, I am pleased to have this opportunity to discuss the Centers for Disease Control's efforts to prevent and control AIDS.

I would like first to clarify, however, that the views I am expressing today, particularly with respect to AIDS antibody testing, represent the views of CDC. They are being discussed with other agencies of the Public Health Service and the Department. The Department will ensure that these issues are discussed with other interested agencies within the Executive Branch and then brought before the Domestic Policy Council. This is necessary before an Administration view can be presented.

Despite our best efforts, the AIDS epidemic as measured by case reports continues to grow. Thirty-five thousand five hundred and eighteen cases of AIDS have been reported through May 11, 1987, and 20,557 of these patients have already died. Due to the urgency of this situation, as Senator Thurmond said, the President has declared AIDS public health enemy number one.

The majority of cases continue to occur among homosexual and bisexual men and intravenous drug abusers. Over 1,300 cases of heterosexual transmission and nearly 500 cases of AIDS in children have been reported.

There is no vaccine against AIDS, and only one licensed drug, with limited therapeutic benefit, is available. Infected persons may be capable of spreading the virus to others for years before experiencing the signs or symptoms of AIDS.

At this time, information and education, including antibody testing and counseling aimed at motivating individuals to eliminate high-risk behavior, are the only means we have to prevent the spread of HIV infection.

Safeguards have been put in place to make the Nation's blood supply safer. Alternate test sites have become counseling and testing programs, and State and local AIDS health education/risk reduction programs are now in place across the Nation.

The report of the Public Health Service meeting in Coolfont, West Virginia, last June and the Surgeon General's Report on AIDS that was issued in October together mark the beginning of a more intense phase in our information and education efforts.

CDC has coordinated the development of an "Information and Education Plan" to prevent and control AIDS in the United States. This is a comprehensive plan for informing and educating the American people about how this disease is transmitted.

My written statement provides a description of the Information and Education Plan.

Prevention and control of AIDS will depend upon successfully interrupting the transmission of the virus among those persons whose behaviors or their circumstances put them and others at risk of infection.

One of the major elements of our efforts to prevent sexually transmitted AIDS is the provision of assistance to States in conducting AIDS prevention programs which include HIV antibody testing, counseling, and health education and risk reduction activi-

ties. This year, CDC awarded AIDS prevention cooperative agreements totalling more than $24 million to all States and territories and selected cities for this purpose.

These cooperative agreements also include a health education and risk reduction component. In all of the 55 participating States and metropolitan areas, information and education activities have been initiated, and work has begun to define their AIDS problems in detail. Twenty-one of these projects specifically target informational services to black communities, and 15 to Hispanic populations.

It is important to view the role of testing and counseling within the context of our overall strategy for preventing the spread of infection. This strategy has two main components designed to alter risk-associated behaviors. The first involves directing AIDS information to the general public and selected subsets of the general public, based on the specific needs identified for each. However, a great many people whose behavior puts them at risk for AIDS misperceive their personal risk or deny their risk despite targeted educational programs.

Therefore, the second component of the AIDS prevention strategy is designed to reach such high-risk people at a personal level through the provision of educational materials and one-to-one counseling. From the onset, education and counseling were integral to HIV antibody testing because of the potential emotional trauma involved if the test is positive and the need to guide people in making informed decisions and adopting behaviors that would eliminate further transmission.

On February 24th and 25th, 1987, CDC convened a conference to discuss public health, medical, and public policy issues related to broader implementation of AIDS antibody testing. CDC has been working with State and local health officials to explore the need for additional recommendations concerning HIV antibody testing.

Our Nation's health workers represent a major channel for providing accurate AIDS information to patients and their sex partners, friends and family members, allied health care workers, and the public. Additionally, some health care workers because of their occupation need to be informed about the risk of infection through parenteral exposure and how to avoid it.

CDC has engaged in a wide variety of AIDS prevention activities, including publishing 22 guidelines in the Morbidity and Mortality Weekly Report. We have distributed slide series in response to nearly 4,000 requests. We have provided over a half million copies, as well as camera-ready copy of the Surgeon General's Report on AIDS and conducted training courses for laboratory workers.

I have highlighted the work we have done in cooperation with many others in the public, private, and voluntary sectors. To meet the AIDS challenge will require an all-out effort by the whole of our society.

I will be happy to answer any questions you or members of the Committee may have.

[The prepared statement of Dr. Mason follows:]

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta GA 30333

STATEMENT OF

JAMES O. MASON, M.D., DR.P.H.

DIRECTOR

CENTERS FOR DISEASE CONTROL

PUBLIC HEALTH SERVICE

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

UNITED STATES SENATE

MAY 15, 1987

Mr. Chairman and Members of Committee:

I am pleased to have this opportunity to discuss the Centers for Disease Control's (CDC) efforts to prevent and control the spread of the HIV virus and the resulting acquired immunodeficiency syndrome (AIDS). I would like first to clarify, however, that the views I am expressing today, particularly with respect to AIDS antibody testing, represent the views of CDC. They are being discussed with other agencies of the Public Health Service and the Department. This Department will ensure that these issues are discussed with other interested agencies within the Executive Branch and then brought before the Domestic Policy Council. This is necessary before an Administration view can be presented.

Despite our best efforts, the AIDS epidemic continues to grow. More than 35,000 cases of AIDS have been reported to date; and more than 20,000 of these patients have already died. It is estimated that by the end of 1991, the cumulative total of AIDS cases in the United States will reach 270,000 and result in nearly 180,000 deaths. Due to the urgency of this situation, the President has declared AIDS the public health enemy number 1.

The majority of cases continue to occur among homosexual and bisexual men and intravenous (IV) drug abusers. Nearly 1,300 cases of heterosexual transmission and nearly 500 cases of AIDS in children have been reported. This includes 695 persons, 133 men and 562 women, who have had heterosexual contact with a person with AIDS or at risk for AIDS and 659 persons, 527 men and 132 women, without other identified risks who were born in countries in which heterosexual transmission is believed to play a major role, although precise means of transmission have not been fully defined.

There is no vaccine against AIDS, and only one licensed drug with limited proven therapeutic benefit has been developed. Complicating the picture is the fact that infected persons are capable of spreading the virus to others for years before experiencing the signs or symptoms of AIDS. At this time, information and education, aimed at motivating individuals to eliminate high-risk behavior, are the only means we have to prevent the spread of HIV infection--the virus that causes AIDS.

Recently there have been significant changes in direction and momentum of the efforts to control and prevent AIDS. Eighteen months ago, among our primary concerns were ensuring the safety of our blood supplies and providing alternate testing sites for people who believed they may have been exposed to the AIDS virus. Since then safeguards have been put in place to make the blood supply safer; the alternate test sites have become counseling and testing programs; and AIDS health education/risk reduction (HE/RR) programs are in place across the Nation.

The report of the PHS meeting in Coolfont, West Virginia, last June and the Surgeon General's Report on AIDS that was issued in October together mark the beginning of a more intense phase in our information and education efforts. The American public has learned a great deal about how they can protect themselves and others from AIDS.

CDC has coordinated the development of the "Information/Education Plan to Prevent and Control AIDS in the United States." This is a comprehensive PHS

Plan for informing and educating the American people about AIDS. The Plan specifies the audiences to be addressed, the basic elements of AIDS information and education, and the outline of strategies by which this education can be accomplished. Under the Plan, our efforts are targeted to certain populations: the public-at-large, school and college-aged youth, persons at increased risk or infected, and health workers.

THE PUBLIC-AT-LARGE

An informed public provides the foundation upon which other information/education programs can build. Individuals need further information on the steps needed to protect their health. Special efforts are needed to provide information through a variety of channels--television, radio, press, advertisements, and personal appearances. The program must be closely coordinated and sustained over a long period of time in order to adequately inform the public. We continue to distribute information to the public. For example, we have distributed 515,000 copies of the Surgeon General's Report. The national AIDS Hotline is now being operated 24 hours a day, 7 days a week under a contract with the American Social Health Association. An average of 700 calls are answered each day. And, this year we will establish a national AIDS Clearinghouse system and will be contracting with an ad agency to help us design a national public information campaign. We are hoping to have a kickoff for this campaign this coming fall.

SCHOOL- AND COLLEGE-AGED YOUTH

In 1987, we are initiating a comprehensive school health education program. A principal feature of the program will be the provision of fiscal support and technical assistance to about 10 State and 12 local education agencies in areas with the highest incidence of AIDS to rapidly implement effective education about AIDS for students and for school-aged youth who do not attend school. The scope and content of these AIDS school health education programs will be determined at the local level with assistance from the health agency. We are coordinating these activities with the Department of Education. Training and demonstration projects will be established in three metropolitan areas and in one State. School officials and teachers from around the country will be able to attend training sessions in order to learn firsthand how to develop and implement effective AIDS education in the schools. In this way we can assist school systems that do not receive direct funding.

To supplement the State and local efforts, we will be working with national organizations to help schools provide effective AIDS education. Through these organizations, we hope to stimulate, reinforce, and assist State and local efforts to reach students, school-aged youth not attending school, college populations, and high-risk Black and Hispanic youth.

To round out our program, we will be undertaking a number of other activities designed to assist the State and local education agencies, such as establishing an annotated computerized bibliography of relevant AIDS

educational materials, stimulating private sector development of effective school health education materials, assessing the impact of national, state and local efforts, and establishing a national coalition for AIDS school health education.

PERSONS AT INCREASED RISK OR INFECTED

Prevention and control of AIDS will depend upon successfully interrupting the transmission of the virus among those persons whose behaviors or their circumstances put them and others at risk of infection.

The major element of our efforts to prevent sexually transmitted AIDS is the provision of assistance to States in conducting AIDS prevention programs which include HIV antibody testing, counseling, and health education/risk reduction activities. This year, CDC awarded 58 AIDS Prevention cooperative agreements totaling more than $24 million to States, territories, and selected cities for this purpose.

It is important to view the role of testing and counseling within the context of our overall strategy for preventing the spread of HIV infection. This strategy has two main components designed to alter risk-associated behaviors. The first involves directing AIDS information to the general public and selected subsets of the general public based on the specific needs identified for each. However, a great many people whose behavior puts them at risk for AIDS misperceive their personal risk or deny that risk despite targeted educational campaigns.

Therefore, the second component of the AIDS prevention strategy is designed to reach such high risk people at a "personal level" -- through the provision of educational materials and one-to-one counseling. From the outset, education and counseling were integral to HIV antibody testing because of the potential emotional trauma involved if the test is positive and the need to guide people in making informed decisions and adopting behaviors that would eliminate further transmission.

In mid-1985, funding was provided for 50 testing and counseling projects covering nearly 900 sites through which more than 79,000 people were tested, and many more received AIDS educational materials and heard personal prevention messages from health professionals. Of those tested, about 17 percent were seropositive. Persons who are tested at these sites are self-selected, presumably because they believe themselves to be at increased risk for HIV infection. Therefore the prevalence of seropositivity among these persons would not necessarily be representative of that in the general population.

In 1986, testing sites funded by these projects increased to almost 1,100 through which about 150,000 people were tested. Preliminary reports indicate that nearly 19 percent of those tested were seropositive. Pretest counseling sessions increased 89 percent, and post-test counseling increased by 118 percent in 1986 over 1985.

In March 1986, CDC published recommendations in the MMWR to assist in preventing HIV infection by sexual and IV drug transmission. These recommendations stated that counseling and voluntary serologic testing for HIV

antibody should be offered routinely to all persons at increased risk when they present to health care settings. Such facilities included, but were not limited to, sexually transmitted disease (STD) clinics, clinics for treating parenteral drug abusers, and clinics for examining prostitutes.

On February 24-25, 1987, CDC convened a conference to discuss public health, medical, and public policy issues related to broader implementation of AIDS antibody testing. Approximately 700 people from public health, clinical medicine, professional organizations, AIDS support groups, and other affiliations attended. Following the conference, CDC has been working with representatives from the Association of State and Territorial Health Officers, the Council of State and Territorial Epidemiologists, the National Association of County Health Officials, and the United States Conference of Local Health Officers to review the results of the conference and to explore the need for additional recommendations concerning HIV antibody testing.

The AIDS Prevention cooperative agreements also include a health education/ risk reduction component. In all of the 55 participating States and metropolitan areas, information and education activities have been initiated and work has begun to define, in detail, their AIDS problems. To date, 21 projects have targeted informational services to black communities and 15 have activities aimed at their Hispanic populations. Many projects have provided high-risk individuals with AIDS education and prevention messages through previously existing community organizations and support groups.

HEALTH WORKERS

Health workers must be prepared to address the health needs of infected persons and to counsel them, or refer them for counseling, to help reduce their risk of transmitting the virus to others. Our Nation's health workers represent a major channel for providing accurate AIDS information to patients, their sex partners, friends and family members, allied health care workers, and the public. Additionally, some health care workers, by virtue of their occupation, need to be informed that there is some very small risk of infection and how to avoid it.

CDC has been engaged in a wide variety of AIDS prevention activities including publishing guidelines in the MMWR, distributing slide series in response to nearly 4,000 requests, providing camera-ready copies of the Surgeon General's Report on AIDS to all AIDS program coordinators, and conducting training courses for laboratory workers in the latest techniques. In 1987, CDC will provide additional specialized training to program coordinators, AIDS health educators, AIDS antibody test counselors, and other health providers. We will also be developing training modules and educational materials to train both practicing dental professionals and dental students about infection control procedures, with an emphasis on AIDS.

I have been highlighting our work in cooperation with official health agencies, and I am proud to be associated with all the dedicated persons who have committed so much personal effort to the battle to prevent and control the spread of the HIV infection. But it must be emphasized that we are not

working in isolation. We must recognize the role that the media has played in helping to create the information base among our populations upon which we will be able to build. And, it is important that we recognize the hard work and invaluable efforts of the many voluntary organizations that have been such a major part of this Nation's effort to deal with this modern day scourge. To meet the AIDS challenge will require an all out effort by the whole of our society.

I will be happy to answer any questions you or the members of the Committee may have.

The CHAIRMAN. Thank you very much, Dr. Mason.

It is estimated that there are already between one and two million people who are infected with the AIDS virus in this country; is that right?

Dr. MASON. We say one to one and a half million, but it is an estimate.

The CHAIRMAN. That is the best estimate, though, of the public health officials.

Dr. MASON. That is right.

The CHAIRMAN. And most of these people do not realize that they are infected; is that right?

Dr. MASON. That is right. Many of them would be unaware that they could be infected.

The CHAIRMAN. And do you feel it is important that those who are infected find out that they are?

Dr. MASON. I think it is very important, so that they can take appropriate action to prevent the spread of the disease to others.

The CHAIRMAN. In February, the Centers for Disease Control had a conference which brought together the top public health officials from around the Nation; is that right?

Dr. MASON. That is correct.

The CHAIRMAN. And it was the recommendation of that conference that there needed to be a greatly-expanded program of voluntary testing nationwide; is that right?

Dr. MASON. That is correct.

The CHAIRMAN. And it was the conclusion of that conference that stronger safeguards and confidentiality and strengthened laws against discrimination were needed so those who need to be tested would be willing to do so; is that correct?

Dr. MASON. Yes.

The CHAIRMAN. And the conference further concluded that mandatory testing would only drive the very people who needed to be tested underground and make it almost impossible to find them. Is that also correct?

Dr. MASON. That was the concern; without confidentiality and safeguards against discrimination, those who one would most want to have come to clinic sites where testing could occur would tend to absent themselves or go underground. We found in the public health field, dealing with other sexually transmitted diseases, that having a working relationship with these individuals is much better, particularly as one gets into contact tracing and other types of activities, if there is a confidence in that relationship that might not be established through mandated testing.

The CHAIRMAN. The CDC wrote a report based on the conference. Did the report state the same conclusions?

Dr. MASON. The report is a set of recommendations that CDC will have to take responsibility for, but they are based upon the recommendations that came from that February conference as well as other detailed meetings that we have held with officials of State and local health departments. So it is a compilation of input from various sources. CDC will have to take credit for the report, or, if there are problems with it, we have to take the blame. It is a CDC book.

The CHAIRMAN. Will you submit a copy of that report for our file?

Dr. MASON. I would be happy to. I thought one had been sent already, but we will be happy to do that.

The CHAIRMAN. Fine. The report contains recommendations about testing in certain specific populations and situations; does it not?

Dr. MASON. It did.

The CHAIRMAN. And what did it say about testing immigrants?

Dr. MASON. There is nothing in that report with regard to aliens or immigrants.

The CHAIRMAN. Do you have any opinion about whether all immigrants should be tested?

Dr. MASON. Well, that is a highly complex issue. In the statute on immigration and naturalization, Congress established a category for exclusion called "dangerous contagious diseases." In that category are diseases such as leprosy and tuberculosis, and five sexually transmitted diseases, including syphilis and gonorrhea.

Now, if I were asked to make a risk assessment judgment, I would say that AIDS is a dangerous contagious disease, contagious since it is transmitted sexually, parenterally and perinatally, and dangerous because it is fatal. In terms of the statute, you cannot very well say that AIDS is not a dangerous contagious disease. So for that reason, it has been placed on the list. Now, that is a risk assessment.

On the risk-management side, there are pluses and negatives associated with that; that reflects the complexity of the issue. Even though AIDS is a dangerous contagious disease, there may be overriding reasons why one might not want to exclude aliens; who have the disease not only health reasons, but a whole series of other reasons that would have to be taken into consideration.

The CHAIRMAN. I suppose there would perhaps be groups that come from certain areas where there is a higher degree of possible infection. Would you draw that distinction, too, in terms of immigrants that come here? Would that not be the case?

Dr. MASON. That is entirely true, although I am not sure the law has any——

The CHAIRMAN. No; I agree with that. But I suppose you would also wonder whether you do not get people who travel to those areas with high degrees of regularity; should you then include those people, as well?

Dr. MASON. Well, this is the terrible complexity——

The CHAIRMAN. Well, we are going to serve these up to you, because we are going to be asked about them frequently, and I think we are going to need some real professional guidance.

I would like to maybe write you a note and go through some of these and get some guidance from you, because you have given this a lot of thought.

What about the prison population?

Dr. MASON. Again, we considered that question, but it was not within the scope of the workshop or our discussion with State and local health officials. Those who are in judicial custody, I think, fall into a different group than those for whom one makes general public health recommendations, so our recommendations specifical-

ly did not deal with that group. In dealing with individuals from the point of arrest or conviction, I think the situation has overtones that go far beyond public health. Although we have opinions about the issue, we felt that a public health agency would not necessarily be the best place to begin those kinds of recommendations.

The CHAIRMAN. How about the test before getting a marriage license?

Dr. MASON. In our report, we have said that in terms of priorities, based on the number of positives, say, per 100,000 people tested, premarital testing would not be as high a priority as testing in a lot of other situations. I think that is the main issue on premarital testing. There may be important reasons for doing it; every couple who has engaged in high-risk behavior certainly ought to want to be tested; information and educational materials should be made available; and couples should be tested if they want to.

But as to whether one should mandatorily test them, I think that is a local decision. Right now, we have 23 States that require premarital testing for syphilis, and we have left that to the States to decide. I believe one should look at HIV prevalence. In some States, it might be reasonable to push hard to have either mandatory or voluntary premarital testing. I think this is a local issue.

But the return on investment in terms of a public health recommendation did not lead us to put it as high on the recommendation list as a number of other situations, where one would encounter far more positives, and where we ought to begin.

The CHAIRMAN. I am going to submit other questions about how to deal with some of the various categories. But let me go to the National Education Plan. As I understand, the National AIDS Education Plan was largely written at the CDC; is that correct?

Dr. MASON. Yes. We were assigned lead responsibility for that last November, and although it has had input from a broad group of agencies within the PHS and others, ultimately the responsibility to carry it out has been delegated to CDC.

The CHAIRMAN. The National Academy of Sciences recommends the use of paid advertising to maximize the effectiveness of a media campaign against AIDS. To date, the National Education Plan has no provision for paid broadcasting advertising; is that right?

Dr. MASON. It talks about interaction with ad agencies, and we have already issued a Request for Proposals (RFP) for a contract. So, yes, there is provision for the use of ad agencies and national media. That would be part of a major campaign that we would like to get under way immediately and would really peak in October.

The CHAIRMAN. Well, it is my understanding that it was just public service ads, rather than paid advertisements.

Dr. MASON. We are going to work carefully with television, radio, newspaper. But I think most of us believe that if we cannot get public service announcements in prime time, then we have to find other ways to be sure that the message goes out when adolescents and adults are watching it. So one way or another, it has to go during prime time.

The CHAIRMAN. Well, we have, as I understand it, $57 million to educate the Nation about AIDS. I do not know what the military spends to get recruits, but I imagine it is probably spending somewhat more than even that. And I think we are going to have to

deal with paid advertising. So we will look forward to sounding you and the people you work with out about that to a greater degree.

Senator Pell?

Senator PELL. Thank you, Senator Kennedy, Mr. Chairman.

As you know, many people take communion. Is there any risk of the passage of the infection by AIDS from passing the communion cup?

Dr. MASON. That question has been raised with regard to almost every communicable disease that exists. We have looked at that as carefully as possible, and we know of no outbreaks that we can relate to the communion cup. We know of no AIDS cases, nor of any other disease where an outbreak has occurred, that are related to the communion cup.

I have to say that, just like it is possible that as I walk out of this building I might be struck by lightning, that is not totally out of the realm of possibility. but I would put the risk of getting AIDS from the communion cup in that same relative risk category. It obviously is not occurring very often, if at all, but I cannot say that it might not ever occur.

Certainly, the practice of using a metal cup, of wiping it after each use, would even further reduce any small risk that may be there.

Senator PELL. Thank you very much.

The CHAIRMAN. Senator Adams?

Senator ADAMS. Thank you very much, Mr. Chairman.

Doctor, I have just one question and that is, in your statement on page 2, you indicate that infected persons are capable of spreading the virus to others over years before experiencing signs or symptoms of AIDS. My question is this: Is there any way for an individual to know during this five- to ten-year period prior to the clinical symptoms appearing if they have been exposed to AIDS by any type of early symptoms that they can recognize, or must this be done by analyzing risk and then use of a blood test?

Dr. MASON. Outside of knowing that you had been involved in behavior that might have resulted in the infection being transmitted to you, there would be no symptoms during that so-called asymptomatic phase. There would be nothing clinical—headache, fever, or lymph node information—to indicate infection other than getting an AIDS antibody test.

Senator ADAMS. Well, it has been indicated in earlier testimony, and I think you have confirmed this, too, that there is now a heterosexual contact risk. So you really do not, other than tracing back from the final test, know how many potential carriers there are out there, then, do you?

Dr. MASON. We do not know the number of potential carriers out there. That is correct. There is no danger in donating blood or in getting a blood test that the disease will be transmitted to you. There is a danger, although small, in receiving a transfusion. But in getting a blood test or making a blood donation, there is no risk.

Senator ADAMS. I see. And so, if there has been, and there is this pool of people that has been testified to, anyone involved now with any of these categories, a person not knowing the symptoms and so on and a five-year incubation period, I am just trying to get some feeling of the degree and size of risk to the population in general

from both heterosexual as well as other type of activities. And I am getting the impression from the testimony of the prior witness and of this one that there is not only a large pool, which you do not know the size of, but that all contacts, unless there is some kind of testing, carry a degree of risk at this point if this is an epidemic phase.

Dr. MASON. During that asymptomatic phase, the only way to determine whether infection exists is to be tested. And that is why——

Senator ADAMS. And that is blood test.

Dr. MASON [continuing]. That is by a blood test. That is why we recommend additional testing, and that testing become routine in a whole series of clinical settings. By clinical settings, I am talking about both the public health clinics and a physicians office. We recommend testing be done routinely; that each person who comes into that setting be advised to have a test. If individuals have been involved in high-risk behavior, they should be advised that they ought to have a test.

But, just as Dr. Redfield said, at this time, it seems prudent to offer them an opportunity to exempt themselves from the process if they do not wish to be tested. For example, if a person comes to a sexually transmitted disease clinic with gonorrhea, you would offer them a test, but you would not refuse them services if they exempted themselves from the testing. You still would treat their gonorrhea, and counsel them with regard to the transmission of AIDS.

Senator ADAMS. Thank you, Doctor.

Thank you, Mr. Chairman.

The CHAIRMAN. Doctor, just a final point. As I understand, the Administration's Education Plan is $150,000 to reach college students. Is that right?

Dr. MASON. Would you repeat that?

The CHAIRMAN. One hundred fifty thousand dollars to reach college students. That is the figure that was made available to me.

Dr. MASON. For each college student?

The CHAIRMAN. No, no; the total amount in the whole education program for all colleges was $150,000. That is the figure which I have been informed of, and of course, it works out, with 3,000 colleges, to $50 per college.

Now, if you look in a comparable way at what the British are doing, they spend about $30 million; they are one-quarter or one-fifth of the population. They distribute a pamphlet in every home, plus buy newspaper ads. We project that they are either three or four times the amount that we are expending—not that money is the only answer, and we all know you should not just try and answer the problem by throwing money at it. But we do know there are a good many people up in New York and other places who spend their lifetime trying to get a message across. And I do not think they would feel, at least the ones we have been in touch with, that this kind of allocation of resources in terms of the education program is going to do the job.

I do not know what comments you would like to make, just about whether you believe that additional money could be used effectively in terms of an education program, or whether you are prepared to give us any round figures—I do not know.

Dr. MASON. We have been told to mount a vigorous, aggressive educational campaign. When we have identified resource needs—and we do, quite frequently, with AIDS—we have been very fortunate in Secretary Bowen's response in seeing that those needs are communicated. We expect that that will continue in the future.

The CHAIRMAN. All right. We will leave it at that.

I want to thank you. We will get back to you on the whole testing legislation and get your input and advice. We want to commend CDC for the work that it has been doing and the guidance and, I think, constructive approach that is being given from CDC. We know you have been very much involved in that, and we want to commend you for the job that you are doing.

Dr. MASON. Thank you.

The CHAIRMAN. Thank you very much.

Our next panel includes Margaret Fischl, Department of Medicine, University of Miami; and William Haseltine, who is Chief of the Department of Biomedical Pharmacology of the Dana-Farber Cancer Institute in Boston.

STATEMENT OF DR. MARGARET A. FISCHL, ASSOCIATE PROFESSOR OF MEDICINE, UNIVERSITY OF MIAMI SCHOOL OF MEDICINE, MIAMI, FL; AND DR. WILLIAM HASELTINE, CHIEF, DEPARTMENT OF BIOMEDICAL PHARMACOLOGY, DANA-FARBER CANCER INSTITUTE, HARVARD MEDICAL SCHOOL, BOSTON, MA

Dr. FISCHL. I would like to thank you for this opportunity to testify.

As the Medical Director of the Comprehensive AIDS Program and as the Director of the Clinical Research Program, I think I would like to share with you the impact that AIDS has had on a large medical center that is also a very large research center, and I would like to focus predominantly on the areas of patient care and research.

Just for some background information, Florida reports the third-largest number of cases of AIDS in the Nation, and the City of Miami reports the fifth-largest number of cases per Standard Metropolitan Area.

Our Medical Center is situated in such a way that we actually service more than 50 percent of the patients with AIDS in the State of Florida. We also act as a tertiary center for the referral of difficult cases. As a major center for evaluating new treatments, we also have a large number of patients who will come to our center to obtain research drugs.

Therefore the impact on our health care system has absolutely been staggering.

Based on current projections of incidence, we projected that by 1989, more than 50 percent of the resources in the Department of Medicine would be devoted to the care and treatment of patients with AIDS alone.

With these projections, we rapidly implemented programs in 1986 based on the experience in San Francisco and focused very carefully on the development of alternate or novel ways of caring for patients with AIDS and AIDS-related illnesses. With this goal in mind, we built and developed an outpatient ambulatory and day

care treatment center, where we try to use community resources and also turn to community hospitals and physicians in our area to take on the burden of care of patients with AIDS.

Since we implemented this program, we are now presently seeing 60 new cases of AIDS per month in our facility, and we anticipate that over 7,000 appointments will be made in our clinics and research clinic.

However, our inpatient census has fallen from 50 to 60 at any one time to 20 to 30 at any one time, and our major focus now is in the outpatient setting.

Our ability to cut health care costs has literally been halved by using this ambulatory approach. In part, the success of this program and similar programs throughout the country, I think, also has relied heavily on returning the responsibility of primary health care back to community hospitals and physicians. Educational programs are absolutely needed to educate physicians fairly rapidly, to bring to them resources at medical centers for specialized testing, and also to make available to them research medications for their patients.

Our experience also at our Medical Center has been unique in a way, in that we treat patients from a broad social and ethnic background. Along with several other academic centers, we continue to see a dramatic increase in the incidence of AIDS among intravenous drug abusers and heterosexuals. Many of these individuals are from the inner-city indigent population and frequently involve minority groups. It will therefore be essential for health care program delivery to reach community physicians and facilities in these areas.

As an academic center, we have not only tried to put forth a treatment program, but also be involved in clinical and basic research on a wide range of medical areas.

In conjunction with the CDC, NIH, and industry, we have had to rapidly expand our facilities, personnel and programs in a relatively short period of time. Funding which pays the direct costs associated with these research programs are important, but nowhere cover the development costs that we have had to build the Comprehensive AIDS Program.

Growth in AIDS-related research within our Medical Center has strained the system beyond its capacity to provide for institutional resources, capital equipment and administrative support.

In addition, there are hidden efforts involved in the national coordination of planning of programs that have not been compensated. Large network programs such as the AIDS Treatment Evaluation Unit, the Drug Discovery Program, require extensive time on investigators at academic centers and funding agencies that translate directly into manpower and costs that have not been covered.

To briefly summarize, then, the impact in our Center and with reference to this bill, really have to commend everyone who has worked on this bill because I think it addresses for us some major issues related to a rather multidisciplinary approach to health care, to look for novel methods of outpatient care, and also to involve disciplines including psychosocial aspects, home care delivery systems.

I think it is also important that the development of a research center that can compete for a variety of not currently available funds is absolutely critical, because I think these centers that have sprung up across the country have paid invaluable information to AIDS research. They are experiencing difficulties in continuing to do this research, and I think the ability to fund them as comprehensive centers is absolutely critical.

Thank you.

[The prepared statement of Dr. Fischl follows:]

STATEMENT OF MARGARET A. FISCHL

Testimony for the United States Senate Committee on Labor and Human Resources hearing on AIDS, May 15, 1987.

As the Medical Director of the Comprehensive AIDS Program and AIDS Clinical Research Unit at the University of Miami Medical Center since 1982, I would like to thank you for this opportunity to testify, and I would like to share with you the impact of AIDS and AIDS-related illnesses at our medical center, focusing mainly in the areas of patient care, training and education, and research.

For background information, Florida reports the third largest number of cases of AIDS in the nation, and Miami reports the fifth largest number of cases per SMSA (Standard Metropolitan Statistical Area). Our medical center serves not only as a primary health care center for more than half of the patients with AIDS reported in the state of Florida but also serves as a tertiary referral center for the more difficult cases of medical diagnosis and management. It is also a major center for the development and testing of new drugs and therapies. The care and treatment responsibilities impacting in our center, and many similar centers throughout the country, is not infrequently overwhelming. Based on projected increases in the incidence of AIDS, we estimated that by 1989 more than 50% of our resources in medicine would have to be directed to the care and treatment of patients with AIDS. By 1985, we were seeing approximately 40 to 45 new cases of AIDS or AIDS-related illness per month and over 2000 appointments had been in our outpatient or research clinics. Our average inpatient service climbed to 45 to 55 patients at any one time, representing well over one third of our inpatient service. The average cost of health care delivery to a single patient over a 2 year period was close to $125,000. Based on this experience and increasing projections by the Centers for Disease Control, we implemented several programs in 1986 in the hopes of decompressing our medical center and focused very carefully on the development and implementation of alternative or novel ways of caring for patients with AIDS and AIDS-related illnesses. With this goal in mind, we developed an outpatient ambulatory program and day treatment center, utilized community resources and community hospitals and physicians. Through the assistance of funding by HRSA (Health Resources and Services Administration of the Public Health Services), the Robert Wood Johnson Foundation and the State of Florida, we have been able to build and implement an ambulatory and day treatment center and expand critical community resources. This has allowed us to decrease the need for in-hospital stays, to treat patients in an outpatient setting or through home care infusion programs, and to seek assistance from community hospitals and physicians in sharing the burden of health care delivery. To date, we see approximately 60 new cases of AIDS or AIDS-related illness per month and over 7000 appointments are made per year in our

outpatient and research clinics. Our average inpatient census has fallen to 25 to 30 patients at one time, despite an increasing incidence of AIDS. The average cost to deliver medical care in this setting per patient has decreased by almost half.

In part, the success of this program and similar programs throughout the country has relied heavily on returning some of the responsibilities of primary health care back to community hospitals and physicians. To facilitate this process, we have established a network of community physicians interested in developing treatment programs for AIDS patients at their local hospitals or offices. We have included an education program to update this working group on the latest information about AIDS, to discuss diagnosis and difficult patient management and to expand our treatment and research programs to include their patients. More recently, we have undertaken the development of an educational program to a network of primary care physicians and facilities throughout the Miami and Dade county area. The continued success of such treatment programs will depend heavily on continuing technical assistance by academic medical centers to primary care providers, development of broad range community step down services, and availability of universal funding for patient care. The primary care systems, including both physicians and hospitals, cannot be expected to provide uncompensated indigent care.

Our medical center, along with many other centers, has also had to develop unique experience of evaluating and treating patients from broad social and ethnic backgrounds. Along with several other academic medical centers, we have continued to see a dramatic increase in the incidence of AIDS among intravenous drug abuser and among heterosexuals. Many of those individuals are from an inner city indigent population and frequently involve minority groups. It will, therefore, be essential that health care delivery programs and services be made available to community physicians and facilities servicing these areas and patients.

As an academic medical center, we have also been closely involved with both clinical and basic science research across a wide range of medical areas. The understanding of the virus itself, its impact on multiple human systems, natural history and transmission studies, and the development and testing of new therapies for AIDS are just some of the areas being addressed. In conjunction with the Centers for Disease Control, the NIH intramural programs and to some extent private health related industries, we have had to face rapid expansion of our facilities, personnel and programs in a relatively short period of time. Funding which pays the direct costs associated with these research projects are important but are not sufficient for the development of comprehensive AIDS research programs. Growth in AIDS-related research within an academic medical center has strained the system beyond its capabilities to

provide for institutional resources, capital equipment and administrative support. In addition, the hidden efforts involved with national coordination and planning of programs has not been compensated. Large network programs such as the AIDS Treatment Evaluation Units and the drug discovery groups require extensive time on the part of investigators at academic centers and funding agencies, and this translates directly into manpower and costs that have not been covered.

Finally, the academic medical center with frequent affiliations with institutions of higher education, maintain interest in a wide range of training and educational issues. Included in these are the development of undergraduate and graduate medical personnel, continuing medical education for community based physicians and health care workers and serving as a primary source of new information for public education. There is clear need for support of aggressive community technical assistance and continuing medical education. Specialized fellowship training programs are needed to support both basic science and clinical personnel to meet the increasing technical demands of this epidemic. Mechanisms for effectively and quickly translating new investigative information to the public through responsive media campaigns are also urgently needed.

In review of this proposed legislation, I am greatful to note that many of these issues important to academic medical centers are addressed. My compliments to you Senator Kennedy and to all who have developed this legislation.

While there are many aspects of the Bill which are noteworthy I would like to emphasize some which especially address important needs.

Making academic medical centers partners in the development of State plans is a welcome responsibility.

Expansion of the potential recipients of community education, information and risk reduction grants to include private, nonprofit and community based organizations will assist academic medical centers in fulfilling some of its educational goals. Academic medical centers would also be pleased to work with the Centers for Disease in placement and training of fellows under provisions of the Bill.

The Bill's provisions for support for Care and Treatment Networks meet needs which I have described in this statement. Of particular importance is the recognition within this proposed legislation of the importance of various types of care support including medical, psychosocial, practical assistance, and the importance of well coordinated case management.

As providers of HIV screening, academic medical centers strongly support the provision of resources to insure effective counseling in conjunction with testing.

Of particular importance is the opportunity to develop a network of Research Centers and to compete for a variety of not currently available support for the research infrastructure.

I believe that this proposed legislation is extremely important to the continued development of a well coordinated, multifaceted attack on this disease.

Thank you for the opportunity to provide this testimony.

I would be happy to answer any questions which you may have.

Respectfully,

Margaret A. Fischl, M.D.
Associate Professor of Medicine
University of Miami School of Medicine
Department of Medicine

The CHAIRMAN. If you could explain on the need for more AIDS researchers. You believe that there is a need?

Dr. FISCHL. Absolutely. I think not only are we taxed for facilities and equipment and programs, but the ability to actually educate individuals so they can enter the area of research which is critical; also, to educate them to enter the area of surveillance which is also critical, because if we are to demonstrate to community physicians the ability to care for patients, then we are going to have teachers in the academic centers to teach them literally to do that.

The CHAIRMAN. You had some innovations in the care of AIDS patients. Can you tell us a little bit about what they were?

Dr. FISCHL. Well, the major approach we had was really to move away from an inpatient setting and in to a day care type of setting in which patients could come in, be evaluated, have diagnostic testing in an outpatient setting and actually have treatment in an outpatient setting. Or, they could be discharged early from a hospital to be treated in that day care center or, if that was actually too much of a burden on them coming in every day, seven days a week, to actually implement a home care program and to actually infuse antibiotics in a home care setting.

The CHAIRMAN. Would additional Federal resources be useful to you as you develop this program?

Dr. FISCHL. Actually, they have been critical. Our ability to actually build the program, expand it and put it into work has actually come from funding from HRSA, and also to some part from the State of Florida.

The CHAIRMAN. It is still pretty limited, though, isn't it?

Dr. FISCHL. I think absolutely. The one thing we are battling right now with the budget for next year is what portions of the program can we continue to develop, what portions will we have to delay for another year or two. And one area that is expensive is the home infusion program, and that is actually being threatened to be postponed for major implementation more broadly for another six to nine months.

Although we have tools we know that work already, our ability to actually implement these programs in large scale is being limited because of lack of funding.

The CHAIRMAN. Can the research centers handle the delivery of experimental drugs to all the patients who want them?

Dr. FISCHL. No. I think the one thing that is very clear, the ability to test these drugs even in a small number of patients, looking at 20, 30, 50 patients takes an enormous amount of manpower. To actually extend that project and treat hundreds of patients or to teach physicians how to treat hundreds of patients, those facilities, manpower capabilities do not exist.

The CHAIRMAN. Do you want to focus for a moment on the role of community physicians?

Dr. FISCHL. I think the one thing that has really helped us in our program to decompress the burden in our center which allows us to focus more on education and research is our ability to get to the community physicians, also involve them in educational programs, let them present cases to us, for us to present cases to them, let their patients have access to our medication so that they are now

comfortable, and caring for patients and are doing so in larger numbers.

I think the major problem that they face increasingly is the ability to actually give care to patients, especially as they become indigent.

The CHAIRMAN. Thank you very much. I appreciate it.

Dr. Haseltine?

Dr. HASELTINE. Mr. Chairman, Members of the Committee, first of all, thank you for the opportunity to comment on this Act. I would like to make some extemporaneous remarks to begin with, that reflect some of the testimony that is already given.

I think first of all this hearing is remarkable for bringing to the fore the true magnitude of the problem that the virus poses for us. It is a problem not only of AIDS, but it is a problem of virus infection. And in that regard, I noted that some people use the word "exposure" rather than "infection" for seropositivity. That should really mean "infection" and the full consequences of infection, I think, were presented by Dr. Redfield; that infection is indeed very serious prospect.

I would like to point out that some of the numbers that were referred to in New York City reflect in the population that was studied one in 30 incidence. So that if you get on a bus in New York City, the chances are somebody on that bus with you who is 25 years old is infected; one of 30 of those. That is a truly high number.

We also know how fast the infection can move. We have seen it move from those numbers in central African cities to up to 30 percent of the sexually active population in a five-year period.

If we look at the rate of movement of this infection in New York, it moved about as fast as it did in central African cities over a comparable period of time. Those cities are now experiencing infection rates of up to 20 to 30 percent of their sexually active population.

So when we put those numbers together with the recent realization that infection is very serious outcome, 75 percent-plus probability of life-threatening illness, we are beginning to appreciate the magnitude of the problem. We react to those people who die around us, not to those people who are infected.

Another area I would like to emphasize is that we have no true measure of how many people in this country are infected. I participated in those Coolfont meetings and tried to participate in the estimation of those numbers. Those are very rough, perhaps the roughest possible, estimates. The true answer which was given by Mr. Mason is we simply do not know the number of seropositive people. The only cross-sectional survey data we have comes from the armed forces, and we still do not have cross-sectional survey data of the total U.S. population. We are flying in the dark with respect to our knowledge of how many people in this country are actually infected.

One can make a reasonable guess as to the rate of infection in this country. If one does that, one calculates perhaps 1,000 people a day, and I would say that is a slightly conservative estimate, are being infected every, single day.

If you believe without dramatic medical progress that 75 percent of those or more are likely to die, we have every day in our midst

the equivalent of two 747 jet planes crashing. They may not die until ten years from now, but they are surely in for a very serious infection, and you can be sure, in my opinion anyway, that we are not reacting to a crisis of that magnitude.

One final point that I would like to make regarding testing is that the technology——

The CHAIRMAN. Doctor, just for information, where do you get that 1,000 a day being infected?

Dr. HASELTINE. You can calculate how many people were infected in this country, very roughly estimated, in 1985 or 1986 and calculate that in this next year, there will be probably 500,000 to one million new cases of infection. That is where that number comes from. It is a very simple, straightforward calculation, and I believe my colleagues who will follow, the epidemiologists, may agree with that number. It is not an unreasonable estimate.

Worldwide, of course, it is a much higher number.

Another point that I would like to make is that the technology of testing is not static. I would think by the year's end, we will have two-minute AIDS tests that are as reliable as the current test. It will be technologically feasible to carry out and confirm tests within an hour's period of time. Both the initial test and the confirmation can technologically be achieved within an hour, using methods that have already been tested.

The CHAIRMAN. What do you think the cost will be?

Dr. HASELTINE. The cost will be substantially less. The cost of those kinds of tests will be—the major cost for the confirmation now—I cannot tell you the average number, but it is over $20, and maybe considerably over $20 for confirmation. These new tests will be—I am not in business, but I can tell you the technology—one or two dollars per confirmation and somewhat on that order for the test, rather than $60–$70 for a confirmation now. So it will be cheaper, more reliable and more rapid. So that is not static, and that will, I think, have some impact on our ability to carry out some of these testing programs.

I would now like to go back to the testimony. It is longer, and I wish to have these three documents that I have given to you entered into the record.

The CHAIRMAN. They will be made a part of the Committee's files.

Dr. HASELTINE. I am a research scientist. I have been thinking about AIDS since 1982. My specific expertise is molecular biology, and my remarks will be primarily confined to that part of the Act which deals with the National Institutes of Health.

The major questions that one wished to know the answers to when AIDS first appeared, we now know. We know what the full clinical spectrum is. We know that it is a virus that transmits it. We know how it is transmitted, and importantly, how it is not transmitted.

The major outstanding question from a research point of view and from a medical point of view is can this disease be controlled medically.

We have heard, and I think the first part of the Act deals with that part of the control which is nonmedical—that is, the education programs, risks avoidance, et cetera.

If we view—and I think we should view—this as a race between how fast the virus will spread and our ability to control it, we have two arms that we can use for the control—public education and control, and medical progress.

What is it about the AIDS virus that has so far prevented simple and immediate solutions to the problem, both in terms of developing an effective treatment or an effective vaccine?

Certainly we know that for many diseases of the past, it has been identification of the agent which has led to its cure. For example, with Legionnaire's Disease, the problem fundamentally disappeared once we had identified it. For the problem of polio, once polio was identified as a virus, a vaccine was rapidly made.

Certainly we have known what the infectious agent is and yet now, three years later, we do not have curative treatment, and we do not have a vaccine.

What is the problem, then?

The problem has to do with the nature of the infectious agent. Let me tell you where I am going with this before I do it. That is, what I am going to say is that both the treatment and the vaccine are going to require major coordinated research programs, programs which are likely to last 15 to 20 years, and the time to begin is now. The time to make sure we have all the bits in place to mount such a long and arduous program is also now.

Most microorganisms that one has successfully dealt with can be killed by antibiotics, or you can make simple vaccines for them. The AIDS virus you cannot make an antibiotic for simply because it is a virus, and viruses are not susceptible by killing by antibiotics. It has to do with the fundamental nature of the microorganism.

In fact there is a whole problem in the area of antiviral drugs. If you look through a chemical pharmacopeia, you will see many, many pages devoted to antibiotics and maybe six pages total devoted to antiviral drugs. It is something medical science has just now come to realize is approachable.

So therefore, when we deal with the problem of therapy for AIDS and antiviral drugs, we are dealing with a whole new area of medical science. Drug companies that do have antiviral programs have started them only recently, and many companies still do not have antiviral therapies regardless of whether those therapies are for the AIDS virus or are for any virus at all.

So when we move into this area, we are moving into the frontiers of science. It is not so much a question of planning a shot to the moon, where we had all the pieces in place; it is more a question of actually inventing some of those pieces. So we have to have a much more complex type of research effort. We need a very broad research effort. We have to draw upon our expertise in very wide areas of science.

I have listed some of these areas of science. The reason I do that is because these areas of science are those that are going to be required, and they should be best done in a cooperative manner—cooperation not only between institutes or research institutions, the Federal institutions, the private institutions, and the universities, but they should also be done in a cooperative fashion amongst scientists as well—areas such as chemical synthesis, natural product chemistry, enzymology, structural chemistry, x-ray crystallography,

recombinant DNA technology, protein chemistry, virology, immunology, pharmacology, toxicology, biochemistry. And that is just a partial list. Expertise in all of these areas needs to be strengthened, focused, and applied to these questions.

The CHAIRMAN. If you could, I am going to give you just a couple more minutes, and then get to some questions.

Dr. HASELTINE. Fine. Okay. It is not as long as this. Let me say that there needs to be fundamental integration of a variety of these different types of programs.

I think the Act addresses many of these needs in a very imaginative and positive fashion. The Act encourages cooperation amongst U.S. research institutes, and I think that is appropriate. The Act places the Government in a catalytic role; I think that is appropriate. The Act encourages international cooperation. I think contrary to much of the publicity surrounding AIDS, it has certainly been my own experience that a hallmark of AIDS research is cooperation, and this Act certainly encourages that.

There should be cooperation between preclinical and clinical programs. The Act directs the formation of an advisory board to the AIDS Coordinator. The current activities, and I should say laudable activities, of the AIDS Coordinator at NIH, speaks to the importance of this role and this function.

The Act directs that mechanisms be created for timely review of funding of AIDS research proposals. That is very important in getting new expertise to bear and to mobilizing the resources that exist.

I think very importantly, the Act directs the formation of multidisciplinary centers for AIDS research. They should have both clinical and preclinical dimensions, and they should draw upon a wide variety of scientific talents. The center concept has been validated by the Cancer Centers, which were also Federally-mandated, and in fact much of the knowledge used to approach the AIDS problem was actually developed in such Cancer Centers.

Finally, I would like to say that although much of the parts of this Act reflect that portion that is discussing the National Institutes of Health speaks of cooperation, I think that in fact that is what it should be; it should not be control. Science flourishes in an open environment. If doors are open and the opportunities are available, you can be sure that they will be seized on by the scientific community.

However, there is a danger in such a long-term, broad-based effort of over-control. And what we need is coordination not control. I think what is called for and what we have before us with this blueprint is a blueprint for a war on AIDS similar to the war on cancer that was launched some years ago, and I think that is entirely appropriate given the magnitude of this problem.

Thank you.

[The prepared statement of Dr. Haseltine follows:]

Testimony of William A. Haseltine

Chief, Laboratory of Biochemical Pharmacology,

Dana-Farber Cancer Institute, Department of Pathology,

Harvard Medical School, Department of Cancer Biology,

Harvard School of Public Health

May 15, 1987

Before the Senate of the United States

Regarding a Bill to Amend the Public Service Act

to Provide a Comprehensive Program of Education, Information,

Risk Reduction, Training, Prevention, Treatment, Care, and Research

Concerning Acquired Immune Deficiency Syndrome

Mr. Chairman, Members of the Committee:

Thank you for the opportunity to comment on the Act "Acquired Immune Deficiency Syndrome" education, information, risk reduction, training, prevention, treatment, care, and research.

This act is welcome as it presents a comprehensive and timely response to the AIDS epidemic.

As a research scientist, working on the problem of AIDS since 1982, my specific expertise is related to that portion with the Act entitled "National Program on Acquired Immune Deficiency Syndrome". My remarks will be primarily addressed to that portion of the Act.

The disease we know as AIDS is new to the United States and indeed, as far as can be determined, to mankind. It was first recognized as a distinct clinical entity in the United States in 1981. At that time, there were but a handful of cases that had been identified in young men. These patients presented with a wasting syndrome, loss of immune function, and the development of rare cancers.

As it was a new disease, key features of the syndrome were unknown. Critical questions asked in the early days included:

What was the full clinical spectrum of the disease?

What was the cause of the disease?

Was the disease transmissible from one AIDS patient to another and, if so, how?

Could the disease be treated or prevented?

Within three years, the answers to most of these key questions were forthcoming.

The clinical spectrum of the disease is now understood. It is best described as a progressive degeneration of two major organ systems, the immune system and the central nervous system. A well defined progression of symptoms has been outlined for both adults and for children. There is a growing suspicion that progression to more serious disease is inevitable once the process has begun.

The single biggest breakthrough in the understanding of the disease has been the identification of the causative agent, a virus. The virus that causes this disease is now called HIV. The link between the disease and infection by the virus is ironclad. No one without infection contracts AIDS. Many of those infected with the virus suffer disease consequences.

Discovery of the infectious agent led to the second most significant progress, the ability to diagnose infection. Within six months of the isolation of the virus, a reliable diagnostic test was generally available.

The discovery of the infectious agent, the development of the diagnostic test, and the beautifully constructed epidemiological studies have led to a clear picture of how the infection is transmitted, and just as importantly, how it is not transmitted. The virus is transmitted as a venereal disease from men to women and from women to men as well as by sexual acts between homosexuals. The virus is transmitted from mother to unborn child and by blood transfusions and organ donations. The virus is also transmitted by the use of contaminated needles. Transmission by any other means, if it occurs, is too infrequent to be measured.

The information as well as the diagnostic tools just summarized were available by mid 1984, representing an unprecedented rate of progress by the medical and scientific community.

The dissemination and use of that knowledge comprises the subject of the first part of this Act. In my opinion, the Act reflects both the serious nature and urgency of the problem.

The final question: Can the disease be treated or prevented? requires more discussion.

For many diseases of the past, identification of the infectious agent has been followed quickly by introduction of an effective treatment or vaccine. Such was the case with legionnaires' disease and with polio. Legionnaires' disease can now be effectively treated by antibiotics and polio infection prevented by two types of vaccines.

What is it about the AIDS virus that prevents simple and immediate dilution? What will be required to attain effective treatment and prevention?

The fundamental answer to these questions lies in the nature of the disease agent itself, a virus. Those of us familiar with viruses - particularly those of us working with human retroviruses - the category that describes the AIDS virus - immediately recognize that the development of effective therapy and vaccines might not be simple, and that a major research effort might be required to solve these problems.

Treatment

At the most fundamental level, the difficulty with treatment for AIDS can be attributed to the fact that AIDS is caused by a virus, not another type of microorganism. The major successes in the treatment of most infectious diseases have been achieved by the use of antibiotics. Antibiotics are compounds that selectively kill bacteria, fungi, and larger microorganisms. Antibiotics do not work against viruses. In contrast to larger microorganisms, viruses are small parasites that rely on the machinery of the body's own cells to reproduce. They

do not have their own reproductive capacity. Antibiotics work by poisoning the reproductive capacity of the larger microorganisms. Because the machinery of these larger microorganisms is different from that of the animals that they infect, antibiotics can be designed that kill the invading microorganism but do not kill the cells of the infected animal. Selective killing of the microorganisms with tolerable side effects can therefore be achieved.

Medical science, on the whole, has just begun to embark on the development of antiviral drugs. There are thousands of antibiotics but only a handful of antiviral drugs. The field of antiviral drugs is virtually virgin territory, not only for treatment of the AIDS virus but for medical science. Many major pharmaceutical firms still do not have effective antiviral drug development programs for any virus yet alone the AIDS virus. Many of the pharmaceutical firms that do have antiviral programs have either small programs or have started them only recently.

The problem, therefore, for development of antiviral drugs for the treatment of AIDS is a fundamental one. We are working with margins, trying to kill the virus without killing the cell. What is needed is systematic investigation and exploitation of small differences.

As a rule of thumb, the smaller the virus, the smaller the target for antiviral drugs. The AIDS virus is a small virus. Fortunately, it is not quite so small as we at first imagined. My own research group at Harvard, and that of a small group of scientists at the National Cancer Institutes has recently shown that the AIDS virus is far more complex than other members of its class. From the point of view of therapy, the complexity of these viruses is good for it indicates that there are more potential targets for antiviral drugs.

There has been some progress in the area of treatment. Knowledge of the fundamental properties of retroviruses, acquired over the past twenty years of

basic research in this topic permitted an informed guess as to what drugs might work against the virus without killing the host cell. Some of these drugs were tested and several, the most promising being AZT, have met with some success in clinical trials.

However, in my opinion, we face a long and arduous journey before AIDS curative treatment will be developed. We should be encouraged by the initial success of drugs like AZT but take this success to be only a starting point. It is likely that the successful treatment will require lifelong administration of combinations of drugs that are of low toxicity. Combination chemotherapy will probably be required to limit the long term chronic, toxic side effects of therapy, and to circumvent the development of resistant strains of virus. Drugs that act early in the life cycle, to inhibit virus attachment to the receptor, penetration of the cell, uncoding of the virus, reverse transcription and integration into the host DNA should be synergistic with drugs that act after the establishment of infection to block late events of viral RNA transcription, protein expression, protein processing, and virus assembly and budding. Such drugs should, in turn, be synergistic with immune modulators, classes of compounds that alter the growth and differentiation of immune cells.

An intensive, large scale, antiviral drug development program is required. The size and complexity of this undertaking will require cooperation amongst scientific laboratories with different areas of expertise. The antiviral drug development also requires close working cooperation amongst government research laboratories, private research institutions, and industry. A partial list of research skills required for preclinical drug development includes:

Chemical synthesis

Natural product chemistry

Enzymology

Structural chemistry

X-ray crystallography

Recombinant DNA technology

Protein chemistry

Virology

Immunology

Pharmacology

Toxicology

Biochemistry

We are fortunate to have great depth and skill in all of these areas in our scientific and medical communities. These extant skills are readily transferable to AIDS-related research.

In this approach we must remember that it is not the past that must be recapitulated. We are working at the frontiers of the possible.

In addition to antiviral drug development, the future holds great progress for immune response modifiers. These compounds are typically small, naturally produced molecules that play and important role in the normal growth and development of white blood cells and also serve as natural defenses to viral infection. These molecules are called interleukins, interferons, and growth factors. The most relevant disciplines for the preclinical development of these compounds are:

Immunology

Hematology

Developmental biology

Virology

Recombinant DNA technology

The immune modulators may be best used in combination with antiviral drugs. Our experiments in model systems demonstrate that such combinations may be powerfully synergistic, each type of compound magnifying the effects of the other.

The preclinical studies for drug development should be closely integrated with clinical trials. Information regarding new and promising leads may have the timely impact on the design of new treatment protocols. Novel therapeutic modalities may be introduced first in animal model systems and then in the clinical setting. For example, preclinical studies may provide information regarding:

Drug dosage

The timing of route of drug administration

Potential efficacy of drug combinations

Preclinical trials may also validate novel therapeutic concepts. For example, concepts under test in model animal systems in our own laboratory at the Dana-Farber Cancer Institute are designed to test the efficacy of AZT and AZT in combination with other drugs for:

Protection from infection by treatment immediately following exposure,

Protection from infection by treatment prior to and during exposure,

Protection of the unborn infant of an infected mother

Vaccines

The ideal preventative measure is a vaccine. Vaccines typically raise immunity to invading microorganisms and prevent the establishment of infection. Vaccines for the prevention of many viral diseases have already been developed. These include small pox, rabies, yellow fever, measles, mumps, polio, and most recently, hepatitis B. However, there are a number of viral diseases for which no vaccines are available or for which a new vaccine must be tailored for each new infection. These include: herpes simplex virus (cold sores and venereal disease), Epstein-Barr (mononucleosis), and dengue fever viruses. Despite intensive efforts to develop vaccines for these viruses and diseases, no such vaccines exist.

It is unfortunate that preliminary observations and experiments suggest that the AIDS virus may fall into the latter category of virus. Straightforward attempts to raise protective immunity in animals has not been successful to date. This does not mean that the task of making a vaccine is impossible. On the contrary, I am optimistic that a vaccine can be created. However, to do so may require the solution of several difficult problems simultaneously, problems that have not yet been solved for any microorganism. Potential problems we expect to encounter in vaccine development include:

Surface Infection:

It now seems probable that AIDS virus infection can occur via the mucosa. Prevention of infection may require effective immunity at mucosal surfaces.

The Trojan Horse:

It is possible, but not proved, that the virus may enter the body while hidden inside a cell. For that reason, such virus may be invisible to the

immune system upon entering. Immunity to early infection would require effective neutralization of the earlier steps of secondary infection.

Cell to Cell Transmission:

There is evidence that the virus may spread from cell to cell as well as by virus to cell. Immunity to such cell to cell transmission may be required.

The Cover-up:

There is emerging evidence that the working parts of the outside of the virus are not accessible to antibodies. The binding and fusion domains may be largely hidden from the surface. The extensive sugar modification of the protein that comprises the outside of the virus may contribute to the antigen masking.

The Decoy:

The major immune response made to the virus surface protein is limited to small regions of the protein. The so-called "immuno dominant epitopes" do not elicit high titer neutralizing antibody. These epitopes may serve to decoy the immune system.

A Moving Target:

The amino acid sequence of the viral proteins changes rapidly. Changes in viral proteins can be observed within a single infected person. Multiple strains of the AIDS virus have been isolated. Some contain differences in one quarter of the amino acids of the viral proteins relative to other strains. It is possible that at least some of these changes will resemble alterations seen in influenza virus, alterations that complicate efforts to prepare vaccines.

The response to such a list of potential problems should not be despair. On the contrary, it should be the mobilization of our scientific resources to address these problems.

Once again, we as a country are fortunate that we have the skills to address this problem. Relevant disciplines include:

Immunology

Virology

Structural chemistry

Recombinant DNA technology

Cell biology

Protein chemistry

Adjuvent design

Veterinary medicine

Membrane chemistry

Once again, we should be reminded that new knowledge, both fundamental and applied is needed to solve the problem.

Cooperation

The task before is clear. To mobilize, to organize and to integrate our research and development efforts and to translate this knowledge into effective therapy and prevention.

The process has begun. Increased funding and increased public awareness has focused the attention of an ever increasing segment of the medical and scientific community on the problem of AIDS.

Dramatic progress made in the three short years since the discovery of the virus have paved the way for the involvement of scientists from multiple disciplines. The problems of drug and vaccine design have been brought into sharp focus and defined in terms that are amenable to broad scientific inquiry. In the past year, interest on the part of the pharmaceutical forms in the development of new drugs and vaccines has increased dramatically.

What then is needed? The Act before you, I think, addresses most of the current needs. The Act encourages cooperation amongst U.S. research institutions. Specifically, the Act calls for cooperative programs amongst government laboratories, private research institutes, and industry. Such cooperative programs are appropriate and necessary as the combined resources and combined expertise of these groups is needed. Government can serve as a catalyst and as a coordinator for such diverse programs.

The Act encourages international cooperation. Exchange of scientists and funding of selected programs abroad is recommended. Such cooperation is also appropriate. We should be willing to seek solutions from all parts of the world. AIDS is a world problem not just an American problem. In rare cases where expertise is not available within the United States, it is appropriate to seek it abroad. Contrary to much of the press regarding AIDS research, it has been my own experience that the hallmark of AIDS research to date has been cooperation not competition amongst researchers, both within the United States and between the U.S. scientists and scientists of other nations.

The Act directs the creation of an AIDS coordinator at the National Institutes of Health. The efficiency and desirability of such a coordinator is demonstrated by the activities of the current NIH AIDS coordinator. The task of coordinating NIH intramural research as well as NIH sponsored academic and industrial research is key to rapid progress. Preclinical and clinical trials

must be coordinated. Information flow amongst diverse groups must fostered. The integration of large amounts of data, data accumulating at an ever increasing rate, requires the efforts of a central coordination office.

The Act directs the formation of an advisory board to the AIDS coordinator and recommends a specific composition for such a board. I fully support this concept. The breadth, scope, diversity, and sheer size of the AIDS program is already larger then some NIH Institutes. Advisory boards have served an important role in these institutes. They bring to bear a wide spectrum of expertise and experience and guidance for the research programs. A well informed, active advisory board will be of great assistance to the NIH AIDS program. Such boards include the participation of nonspecialists as well. The nonspecialists also provide the important perspective to the deliberations of the advisory board.

The Act directs that mechanisms be created for the timely review of funding of AIDS research proposals. A six month review and funding cycle is proposed. The speedy review and funding of research grants is key to the mobilization of our scientific resources. Rapid processing of application will permit entry into the area of AIDS research of new specialists. Rapid funding will also permit speedy follow-up of new scientific leads and research concepts. Speed is essential in the race between the AIDS epidemic and medical progress.

The Act directs the formation of a multi-disciplinary centers for AIDS research to be created around the country.

This is an imaginative and important concept. The solution to the problem of AIDS will require the participation of scientists with a broad range of expertise in a single, common program. Such programs should have as their core, expertise in AIDS treatments and AIDS virology. However, they must also include a spectrum of diverse areas of research. As outlined above, the development of

new treatments and vaccines requires the joint contributions of scientists from multiple disciplines.

The advantage of assembling multi-faceted research groups within centers is documented by the success of the cancer centers. These federally mandated centers have proved to be the focal points not only for imaginative and effective new cancer therapies, but also for fundamental research. Indeed, it was advances in virology, immunology, molecular biology and drug development made largely in such centers that have served us well in the face of the current epidemic. Without the fundamental progress made in these areas at these centers, it is unlikely that we would have made the progress that has been made to date with AIDS.

The center concept should serve as a catalyst to attract the best specialist into this area of research. The center should provide the means by which knowledge and reagents can be shared. All too often it is the lack of opportunity that prevents scientists from entering a particular area of research.

The key word for an AIDS research program should be coordination not control. We hear talk of a "Manhattan Project for AIDS". What this phrase may mean is centralized control by government of AIDS research. This is <u>not</u> what is needed. The tight control, secrecy, and elitism of the original Manhattan Project would be injurious to research. We need an AIDS coordinator, not an AIDS czar.

Science, even science on a scale that we are now discussing, flourishes best in an open environment. Present opportunities and scientists will seize them. Open the door to new ideas and they will pour. But try to overdirect, overplan, and creativity is stifled, new ideas closed off, and valuable scientists turned away. What is needed is an all out, well funded and well coordinated research effort. A War on AIDS, similar to the war on cancer, should the order of the day. This Act is a blueprint for A War on AIDS.

The CHAIRMAN. One of the questions that will be asked is whether we can really use additional moneys in terms of the research; do we have the researchers, are there projects out there which would meet the peer review requirements? First of all, do we have sufficient researchers out there? Secondly, are there sufficient research projects that could be usefully invested in?

Dr. HASELTINE. First of all, we have the researchers. We have invested in this country over the past 25–30 years in training biomedical scientists. The success of the biotechnology industry attests to the depth of that manpower, and also the size of our research staff. There is no doubt in my mind that the scientists exist out there.

There has been a natural progression as well in AIDS research. It started at first with only epidemiologists and physicians being able to work on this problem. Then, when the virus was discovered, virologists could work on it and some molecular biologists.

The problem has a natural evolution so that more and more specialties can enter this field as it becomes defined more closely.

For example, we now can imagine that x-ray crystallographers can work on it because the molecular biologists have delivered into their hands pure reagents. So as the science of the field progresses, so too does the opportunity for more and more people to join it.

I am a member of the board of the American Foundation for AIDS Research. Every year, we receive 1,000 letters of intent. We review 400 grants. About half of those, we deem worth funding and are able to fund only about 5 percent. And I have also sat on many review sessions for the Federal Government. There is no doubt that there is an interest and the ability in the scientific community to support a much greater effort, scientific and medical effort, in this area.

The CHAIRMAN. Let me ask you about the time it takes to approve and fund the research grant applications. With investigator-initiated grants, the turnaround time is much lower. Do you believe it is possible to reduce the grant approval time?

Dr. HASELTINE. I think it is certainly mechanically possible to do that. The restrictions, as they exist I understand, have to do with not only the approval, but also the funding cycle.

I have been part of review panels that have six-week turnarounds. It is possible to responsibly review peer review research proposals. There is a mechanical part to getting the grants funded, but I think it is clearly possible to substantially reduce the funding cycle both for investigator-initiated as well as for solicited review.

The CHAIRMAN. Did you come out about where the IOM came out in terms of the amounts that ought to be expended for research?

Dr. HASELTINE. Yes. I think that is a very good estimate. That includes, of course, clinical research aspects. So there are major areas where I think it does not include, which is the treatment, the development of treatment. And I think another area that was not really touched on is as treatment becomes more effective, then I think what we will see over the next ten years is gradual improvements in treatment. The costs associated with each AIDS case will go up, not down.

The CHAIRMAN. Why is that?

Dr. HASELTINE. Because people will be surviving. Now, people do not survive, and you will be treating them for longer times. I think

if you really envision what therapy will be based, based on this virus—you have to consider that this is a virus like herpes. Once you are infected, you are always infected; you will never cure it. In fact the optimum goal, given what we know about this virus, is not to remove the virus from the person. That probably will never happen any more than you can remove the chicken pox virus or the herpes virus that you may have contracted. What you can do is control it, and that probably means for this infection, lifelong treatment with doses of drugs that are not toxic. And that is going to be a substantial health care cost especially if by the time we get such treatments, there may be four or five or more million Americans infected with the virus.

The CHAIRMAN. Well, that is very ominous.

Dr. HASELTINE. I think the problem is even with researchers who work with this virus every day, it is a serious problem to really feel the magnitude of the problem rather than you can read about it, you can analyze it intellectually, but when you realize that we have, I would say, at least two million of our fellow citizens infected who will be infected for the rest of their lives, and that number is likely to increase substantially, we begin to realize the magnitude of this problem.

The CHAIRMAN. Okay. Thank you very much. We look forward to keeping in touch and working with you.

I would ask that our final panel of witnesses please come forward: Dr. Stephen Joseph, Commissioner of the New York Department of Health; Dr. David Werdegar, Director of the San Francisco Department of Public Health; Peter Ungvarski, Director of the AIDS Program of the Visiting Nurse Service of New York, and Milton Gossett, Chairman of Saatchi and Saatchi Advertising in New York.

We will start off with Dr. Joseph. As we mentioned earlier, one-third of all the diagnosed cases to date have been in New York, and New York is feeling the most severe effect of AIDS among drug users. We look forward to your testimony.

We will include your full statements in the record and also some transcripts of your comments that you made at the conference earlier, too. So I think we will have a pretty good record.

We will start with Dr. Joseph.

STATEMENTS OF DR. STEPHEN JOSEPH, COMMISSIONER, DEPARTMENT OF PUBLIC HEALTH, CITY OF NEW YORK; DR. DAVID WERDEGAR, DIRECTOR, SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH, SAN FRANCISCO, CA; PETER UNGVARSKI, DIRECTOR, AIDS PROGRAM, VISITING NURSE SERVICE OF NEW YORK, NY, ON BEHALF OF NATIONAL ASSOCIATION FOR HOME CARE; AND MILT GOSSETT, CHAIRMAN, SAATCHI AND SAATCHI ADVERTISING, NEW YORK, NY

Dr. JOSEPH. Thank you, Mr. Chairman.

It is a pleasure to be here this afternoon and I will in the interest of time present my remarks in somewhat summary fashion, and would request that the entire statement be included. And attached to my testimony are a series of graphs and charts which I

will not refer to in the interest of time, but they bear on some of the questions you have raised.

I also have for you and the other Members of the Committee a recent report to the Mayor of New York City that details many of the issues related to the AIDS epidemic in New York City, and I have a copy of our HIV Counseling and Testing Policy, which reflects many of the issues that you and others have asked about with regard to testing for infection.

The CHAIRMAN. Could you hand it to my staff, please?

Dr. JOSEPH. Yes. I think there are other copies up there, and you are welcome to those.

Mr. Chairman, as I said earlier, if we wish to have any hope of addressing effectively the AIDS epidemic, we must do three things as a Nation. First, we must have aggressive, articulate and visible leadership from the highest levels of the Administration, and with the exception of the outstanding example of Surgeon General Koop, that leadership has so far been lacking.

Secondly, we do need to adopt a "moonshot" or "war footing" approach to resource commitment both on the research and on the service side, and the bill that we are discussing today is in my view the best news that we have had to date.

Thirdly, a key topic for us in New York that previous speakers really have not mentioned or stressed, this Nation must take seriously the problem of intravenous substance abuse. We will not slow the transmission of AIDS; we will not prevent seepage of the virus into the heterosexual community in New York City or in the Nation at-large until we get serious about a war on drugs.

We in New York City are at the center of the epidemic in North America. We have now had 10,000 cases; 6,000 of those people are dead. We are at 30 percent of the national total. And AIDS is the leading cause of death in New York City among men age 25 to 44, and ominously, among women age 25 to 29.

We have something like 500,000 people in New York City infected by the virus, and while gay and bisexual men still and will continue to account for the largest percentage of cases, we have seen a significant and alarming rise in the percentage of cases which are among intravenous drug abusers.

We have some 200,000 people in New York City who shoot I.V. drugs, and currently 50 to 60 percent of them are infected with the virus. These I.V. drug abusers will and will continue to be the major source of the spread of infection to women and children in New York City. There are figures in my testimony that describe the connection between I.V. drug use and AIDS. Eighty percent of the women who have been AIDS cases are in I.V. drug use connection; 93 percent of the children who have been infected with AIDS, who have been diagnosed with AIDS, are a result of that connection.

We have had almost 200 children and over 1,000 women in those categories.

As a direct result of the link between AIDS, drug abuse and poverty, AIDS is having an increasing impact upon our cities' minority communities—and this is another point which was not stressed by the previous speakers, which I think is all-important.

Thirty-one percent of our cases in New York City have been among blacks; 23 percent, among Hispanics; 86 percent of male I.V. drug users with AIDS and 90 percent of the mothers of children with AIDS are black or Hispanic. And the potential that the epidemic has for further polarization, racial and ethnic polarization, in our city is a matter of utmost concern.

We will have seen in New York City by the end of 1991 over 40,000 people with AIDS, and as previous speakers have stressed, no one knows what the 10- or 20-year clinical outlook for those who are infected is.

Against that background, as the epidemic spreads, there are a number of public health policies which have emerged as critical. First, we must intensify public education efforts without creating irrational anxiety and hysteria. The most effective way currently to contain the spread of the infection is through a massive, explicit public health education program. We must discuss AIDS honestly, explicitly, in understandable terms, and do that repeatedly.

Secondly, we must take vigorous public health actions while resisting ineffective measures of social control. There are pressures mounting for universal or mandatory AIDS antibody screening programs, but as has been repeatedly said here, forcing people to learn whether they are infected when no treatment is available and unless confidentiality and antidiscrimination can be ensured would be most unwise and counterproductive.

Third, we must have increases in available resource for research and education to augment resources needed in clinical, public health and social service needs.

I fail to understand the reasoning behind the fact that for programs in health education, risk reduction and anonymous counseling and testing in my City, less new Federal money is available this year than was available last year. We must have more support from the Federal level.

The increased Federal support that you are proposing in the bill being discussed today would help us translate these policy issues in several ways to effective measures for controlling the spread of the virus in New York City. It would allow us first to rapidly increase confidential voluntary counseling in HIV antibody testing. We are aggressively making testing and counseling much more available through our anonymous counseling and testing centers, through individual physicians, through our sexually-transmitted disease clinics, and through the hospital base in New York City.

An important adjunct to counseling is HIV antibody testing. Our policy in New York is that anyone should be able to know his or her antibody status, provided the test results are confidential, tests are voluntary, and counseling is available before and after testing.

In the policy that I have distributed to you, you will see that we now believe that every physician on every patient interaction in New York City as a matter of routine should undertake the risk assessment with the patient and if indicated should proceed to counseling and testing under the bedrock principles that I have mentioned.

We have begun a program of contact notification. You asked about contact tracing before. We urge people who are seropositive

to notify their contacts, and we directly and actively will assist them to do this when asked.

We must have increased Federal support to meet increased demand for counseling and testing, and currently in New York City and in the country at-large, trained counselors are the critical constraint to the rapid expansion of testing nationwide.

Next, more Federal support such as proposed in your bill would provide funding to increase public health education, not only to those formerly considered to be in high-risk groups, but to the entire community at-large.

I have listed in my testimony a review of the various kinds of public education and targeted education that we have in the City. Let me just mention two of them, highlight two of them.

We have begun a program with the Department of Corrections in a broad-based AIDS education program to do education of inmates, visitors and corrections staff and to distribute condoms in the prisons to those who are most at risk of acquiring infection in prison.

Just this week, we launched a very explicit, hard-hitting multimedia campaign focusing on heterosexual transmission. The chairman of Saatchi and Saatchi who did this work for the City on a pro bono basis is here on the panel. He may wish to discuss this campaign, if you would like, later. I have brought with me the visuals from that material. And later this spring, we will begin another mass media campaign aimed primarily at the I.V. drug use connection.

The CHAIRMAN. Let me ask just about how you treated the prison population; you decided to distribute condoms, but you are not going to test them?

Dr. JOSEPH. The condom distribution is one element in that program. Let me put it in context, Senator Kennedy. We put 100,000 people a year through the New York City jail system. You stay only a year in the city jails. Of those 100,000 people, 50 percent are former or current I.V. drug users. Of those 50 percent, 50 percent are currently infected with the virus. So we have 25,000 infected people a year in the city's correctional system. The logistic and safety issues of any nonconfidential availability of test results in that system—and the corrections people will tell you that it is very difficult to keep anything confidential inside—are mind-boggling.

We believe that there should be available to inmates, just as to everyone in the society, the availability of confidential or anonymous testing. But we must find ways to do that in a situation that does not put inmates at risk from other inmates or create absolutely impossible logistic situations in our prisons.

So we have gone the education and the condom distribution route within the prisons in our City.

The CHAIRMAN. If you know that that percent of the prison population has the infection, are they segregated at all, or are they just——

Dr. JOSEPH. No, they are not, because with that high a percentage of 100,000 people a year, it would number one be very difficult, impossible, to segregate them; and number two, the antibody status of those individuals is not known.

We do have a hospital-type setting within one of the City jails where prisoners with AIDS who are ill, but not so ill as to require

acute care hospitalization, are segregated. But we have many people in the general population in the prisons who are infected and who are, as I say, in the general population.

As the previous speaker has said, we badly need any increased resources you would provide in this bill for research across-the-board, not only biomedical research, but many pressing issues in epidemiologic research so that we can know more about the patterns of the epidemic. And in the interest of time, I will not detail the research activities we are undertaking in the City, but they are in my testimony.

Let me say, people have not commented on the clinical issues. In New York City today, we are already hospitalizing more AIDS patients than we thought we would see until 1990. We have on any day in the City over 1,000 people in hospital beds with AIDS or AIDS-related infection. That figure is up one-third in the last year, and we look for it to increase 20 percent per year in the near future.

In our municipal hospital facilities, we treat a disproportionately high proportion of substance abusers. Three-quarters of the patients with AIDS at municipal hospitals contracted the disease through the I.V. connection. And the complexities that that poses for treatment, treatment costs and the rest are absolutely astounding. That is one of the things that leads me to say that we must have a substantial and serious Federal approach to the substance abuse issue, ranging all the way from the international interdiction possibilities through increased law enforcement at all Federal, State and local levels, and for prevention, education and greatly expanded substance abuse treatment at the local level.

We are spending this fiscal year in New York City $385 million on AIDS, $98 million of which is City tax levy. That is up from $250 million, or $75 million tax levy, last year. But this will not be sufficient to keep up with the unrelenting progress of the epidemic. We will not shirk our responsibility in this City, but we cannot shoulder the burden alone. AIDS is a national concern. We once accounted for almost half the cases in the Nation. But as the disease spreads, by 1991 New York City will account for only 15 percent of the cases.

A significant Federal commitment is too long overdue. As every State and municipality struggles with the AIDS epidemic, the Federal Government must provide more support such as you are advocating to advance the programs of education, prevention, research and treatment that will remain our critical weapons in the fight against AIDS for at least the next several years.

Thank you very much.

[The prepared statement of Dr. Joseph follows:]

TESTIMONY OF

STEPHEN C. JOSEPH, M.D., M.P.H.

COMMISSIONER OF HEALTH

NEW YORK CITY

presented to the

U.S. SENATE COMMITTEE ON LABOR
AND HUMAN RESOURCES

MAY 15, 1987

NEW YORK CITY

Good morning, Mr. Chairman and members of the committee. My name is Dr. Stephen C. Joseph, Commissioner of Health of New York City. I appreciate the opportunity to appear before this committee to comment on the need for comprehensive programs on education, prevention, research, and treatment for AIDS.

Mr. Chairman, this nation must do three things to effectively address the AIDS epidemic.

First, we must have aggressive, articulate, and visible leadership from the highest levels of the Administration. With the exception of the outstanding example of Surgeon General Koop, that leadership has so far been lacking.

Second, we must adopt a "moon-shot," war-footing approach to resource commitment. The bill under discussion today is a significant step forward, the best news to date.

Third, this nation must take the primary problem of substance abuse seriously. There will be no slowing the transmission of the AIDS virus, or preventing seepage of the virus into the heterosexual community, in the absence of a meaningful war on drugs. The future of the epidemic, in New York and elsewhere in the nation, lies with the AIDS-IV drug use connection.

New York City is the North American epicenter of the AIDS epidemic. We have had over 10,000 cases of AIDS in New York City since 1981, 30 percent of the national total. Six thousand have already died. AIDS is the current leading cause

of death in New York City among men aged 25 to 44 and women 25 to 29.

In New York City today, 500,000 people are estimated to be infected with the human immunodeficiency virus (HIV), which causes AIDS. Gay and bisexual men make up the largest percentage of cases, though their proportion of AIDS cases has fallen from 73 percent in 1981 to 55 percent in 1986, while the proportion of cases among intravenous drug abusers has risen from 22 percent in 1981 to 32 percent in 1986 (Chart 1). Sixty percent of the City's estimated 200,000 heroin users are thought to be HIV-infected.

IV drug abusers have been, and will continue to be, the major source of the spread of HIV infection to women and children in New York City (Chart 2). Of the more than 1000 women diagnosed with AIDS in New York City, 80 percent have been IV drug abusers or the sex partners of IV drug abusers. Although opinions differ on the rate and extent of the current spread of HIV infection among heterosexuals, there is strong agreement that spread of the disease among heterosexuals will continue in areas like New York City, with a high prevalence of infection and IV drug use (Chart 3). The vast majority of the 189 children diagnosed with AIDS in New York City were infected from their mothers, most of whom were IV drug abusers or the sex partners of IV drug abusers (Chart 4).

As a direct result of the link between AIDS, drug abuse, and poverty in New York City, AIDS is having an increasing impact among our city's minority communities (Chart 5). Thirty-one percent of the city's AIDS cases are among blacks;

23 percent are among Hispanics. Eighty-six percent of male IV drug users with AIDS, and 90 percent of mothers of children with AIDS, are black or Hispanic.

By the end of 1991, over 40,000 people will have developed AIDS in New York City alone; 30,000 will have died (Chart 6). No one knows the 10- or 20-year clinical outlook for those now infected. Nor do we know what long-term burdens will be posed by HIV-associated illness, for example, TB or lymphoma (Chart 7, Chart 8). The impact of HIV-immunodeficiency on the trends of other important diseases is under study and as yet is incompletely understood.

The import of these figures is clear: by 1991, the impact of the AIDS epidemic on our citizens, our hospitals, and the entire city will be beyond that of any public health crisis faced in modern times.

Against this background, and as the epidemic spreads in New York City, a number of public health policy issues have emerged as critical. (See the Report to the Mayor from the Interagency Task Force on AIDS, attached.)

First, public education efforts need to be intensified without creating irrational anxiety and hysteria. The most effective way currently to contain the spread of HIV infection is through a massive, explicit public health education program that tells everyone -- not just those formerly considered to be in high-risk groups -- how to avoid risky behavior. People can protect themselves against getting, and giving, AIDS. We must discuss AIDS issues honestly, in explicit, understandable, and repeated language.

Second, vigorous public health actions need to be increased while resisting ineffective measures of social control. Pressures are mounting for measures such as universal or mandatory AIDS antibody screening programs. Virtually all public health officials from areas of highest AIDS prevalence agree that forcing people to learn whether they are infected when no treatment is available, and unless confidentiality can be assured, would be unwise and counterproductive.

Third, increases in available resources for research and education must augment the broad range of clinical, public health, and social service needs. The federal government has been reluctant to propose an adequately funded federal response to AIDS. I fail to understand the reasoning behind the fact that, for programs in health education, risk reduction, and anonymous counseling and testing in New York City, less new federal money is available this year than was available last year. The federal government must do much more to support the unprecedented demands for AIDS resources, without sacrificing necessary research and education efforts.

Increased federal support such as would be made available in this bill would help us translate the policy issues I have just mentioned into measures for controlling the spread of AIDS in the following important ways.

First, it would allow us to rapidly increase confidential, voluntary counseling and HIV antibody testing. New York City is aggressively making these much more widely accessible. Confidential, voluntary risk reduction counseling and HIV antibody testing help people to assess their risk for

HIV infection, understand their HIV antibody status, and incorporate that knowledge into their behavior.

Our counselors in New York City use every contact with those in high-risk groups to sharpen awareness of risk behavior, and discuss any problems the person may be having in reducing risk behavior. Counseling is provided in several different settings: by phone and in groups through the AIDS Hotline and Counseling Service, which provides an estimated 10,000 callers per month with up-to-date information, risk reduction counseling, and referral to community agencies; in person at the Department's two Anonymous Counseling and Testing Centers; and in person at Health Department Sexually Transmitted Disease Clinics.

An important adjunct to counseling is HIV antibody testing. The City's policy is that anyone should be able to know his or her antibody status, provided the test results are confidential, tests are voluntary, and counseling is available before and after testing. The impact of the test results can be devastating; people need to discuss its significance with trained counselors before and after testing.

Our HIV Counseling and Testing Policy (copies of which are attached) recommends that individual physicians should actively consider if their patients are at risk of AIDS infection, discuss risk-avoiding behavior as part of routine medical care of everyone, and offer counseling and, where appropriate, testing to patients at risk.

Testing in New York City is available through free, anonymous test sites established by the City and State Health

Departments, through any licensed physician, and at Health Department Sexually Transmitted Disease clinics.

To support the confidential, voluntary aspects of counseling and testing, we have adopted a course of action known as contact notification. We urge people who are seropositive to notify their contacts, and directly and actively assist them to do this when asked.

As the general public has become more aware of the AIDS epidemic and its implications for the heterosexual population, as public health officials call for counseling and testing of greater numbers of individuals, and as those practicing risk behavior seek more information about their health status, demand for counseling and testing has rapidly exceeded service supply. The Department of Health will continue to make voluntary, confidential counseling and testing sites and opportunities more widely available -- though expanded testing requires substantial investments in money and trained personnel. We must have increased federal support to meet increased demand for counseling and testing. Trained counselors are currently the critical constraint to the rapid expansion of testing nationwide.

Next, more federal support would provide funding to increase public health education risk reduction efforts, especially among high risk groups. For now, the most effective way to reduce the spread of HIV infection is a multifaceted prevention and risk reduction strategy directing education at the general public, health providers, social service personnel,

and community organizations, and targeting information and outreach to people engaged in high-risk behavior.

The Health Department's program of AIDS education is such a strategy. Information to educate the general public about AIDS goes out in bilingual brochures, flyers, videotapes, wallet cards, and subway posters. A $1 million educational campaign promotes latex condom use, including distribution of a million condoms with educational material. We work with the Department of Correction in a broad-based AIDS education and risk reduction program to educate jail inmates about AIDS and provide condoms to those at highest risk of infection. This week we launched a very explicit and hard-hitting public health advertising campaign in the city's print and electronic media focusing on the condom as a means of preventing heterosexual transmission. Later this spring we will begin another campaign directed at IV drug users.

We are increasing our outreach and education to high-risk populations, particularly IV drug users and their sexual partners. Teams of public health educators take their message of AIDS prevention into neighborhoods where IV drug use is concentrated, and we work with many city-wide and local organizations to reach those at risk through IV drug abuse.

As the scope of the epidemic widens, the demand for information is intensifying. We need more federal support for the programs we are already operating, and to allow more community-based groups to continue the educational programs we have established. We need more media programs on AIDS services

and risk reduction. No single channel or mode of information will be adequate. We need to use every means at hand.

Next, federal funding is necessary to help us to expand our knowledge base on the nature of HIV and its transmission. Health Department researchers are collecting data for two studies: a survey of hospital patients suspected of having AIDS to identify associated risk factors, and a study of risk factors for transmission of AIDS in heterosexual couples in which one partner contracted AIDS from a blood transfusion. In another project, Department researchers and five participating hospitals are studying HIV transmission from infected mother to child. A series of blind and anonymous serosurveys are planned, to shed greater light on current infection patterns, especially among women of childbearing age.

The alarming projections of the future course of AIDS make it imperative that we increase our surveillance and research activities. We need federal support to continue to investigate the nature of HIV and its transmission, as well as assess the impact of risk reduction messages on behavior change.

I would like to point out that in New York City, more AIDS patients are already hospitalized than we thought we would see until 1990. On any given day, over 1000 people with AIDS or AIDS-related illnesses occupy New York City hospital beds, including some 350 in municipal hospitals. These figures have increased by one-third during the past 12 months. The patient census of the city's municipal hospital system, the Health and Hospitals Corporation (HHC), is expected to rise at least 20 percent annually. The average total lifetime costs of

hospitalization of AIDS cases is estimated to be between $60,000 and $75,000; figures from St. Luke's-Roosevelt Hospital Center indicate that in 1984-85, the daily cost of hospitalization for AIDS patients was 38% higher than that of comparably ill non-AIDS patients.

HHC facilities treat a disproportionately high share of substance abusers; three-quarters of the patients with AIDS at HHC hospitals contracted the virus from IV drug use, including direct IV drug use, sexual contact with an IV drug user, or being born to an IV drug abuser or sex partner. Because of the connection between AIDS and substance abuse, AIDS prevention efforts must be linked to drug treatment programs and public health education programs to reach this difficult population. The federal government must provide more money for efforts ranging from interdiction at the international level, to law enforcement at all levels, to more federal dollars to states and communities for education and treatment programs.

In New York City, spending for AIDS treatment, testing, counseling, education, and other programs in Fiscal 1988 will be over $385 million, of which $98 million is city funds. This is up from $250 million, $75 million of which is city tax levy, in Fiscal Year 1987.

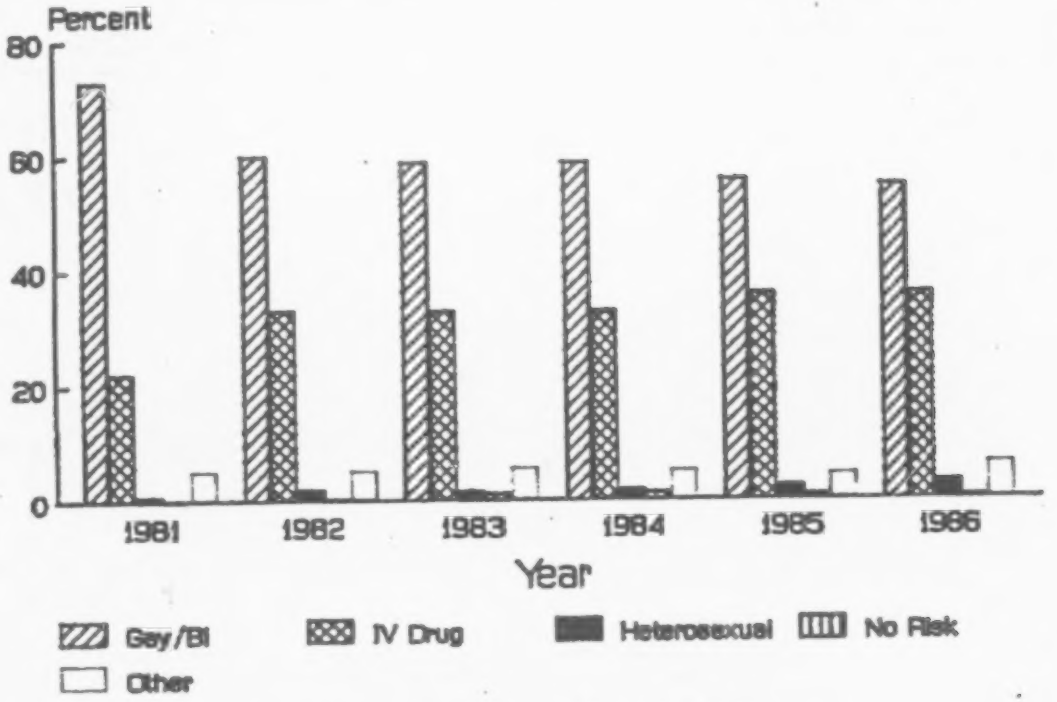
But this will not be sufficient to keep up with the unrelenting progress of the epidemic. New York City will not shirk its responsibility to care for people with AIDS. But we cannot shoulder this burden alone. AIDS is a national concern; New York City, which once accounted for almost half of all AIDS cases in the country, now has less than 30 percent

as the disease has spread throughout the nation, and will have only 15 percent in 1991. A significant federal commitment is too long overdue. As every state and municipality struggles with the AIDS epidemic, the federal government must provide more support to advance the programs of education, prevention, research, and treatment that will remain our critical weapons in the fight against AIDS for at least the next several years. This bill is an important step in that direction.

- End -

Chart 1

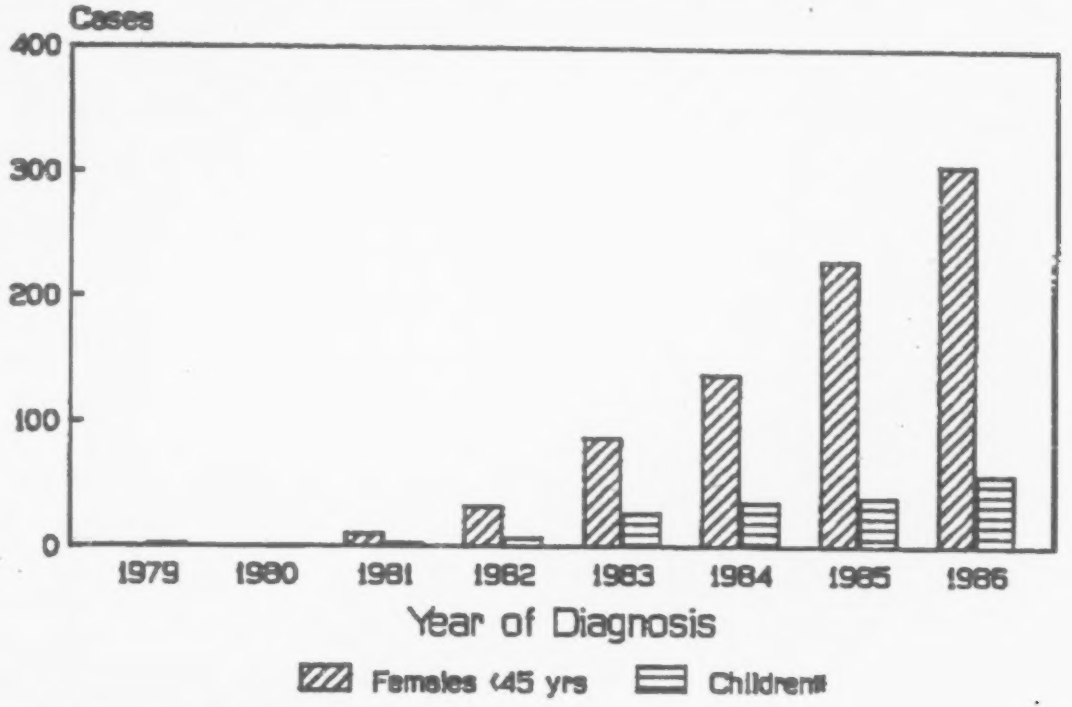
Percent Distribution of AIDS in NYC By Patient Group and Year of Diagnosis



Cases Reported through October, 1986

AIDS INCIDENCE NYC, DECEMBER 1986

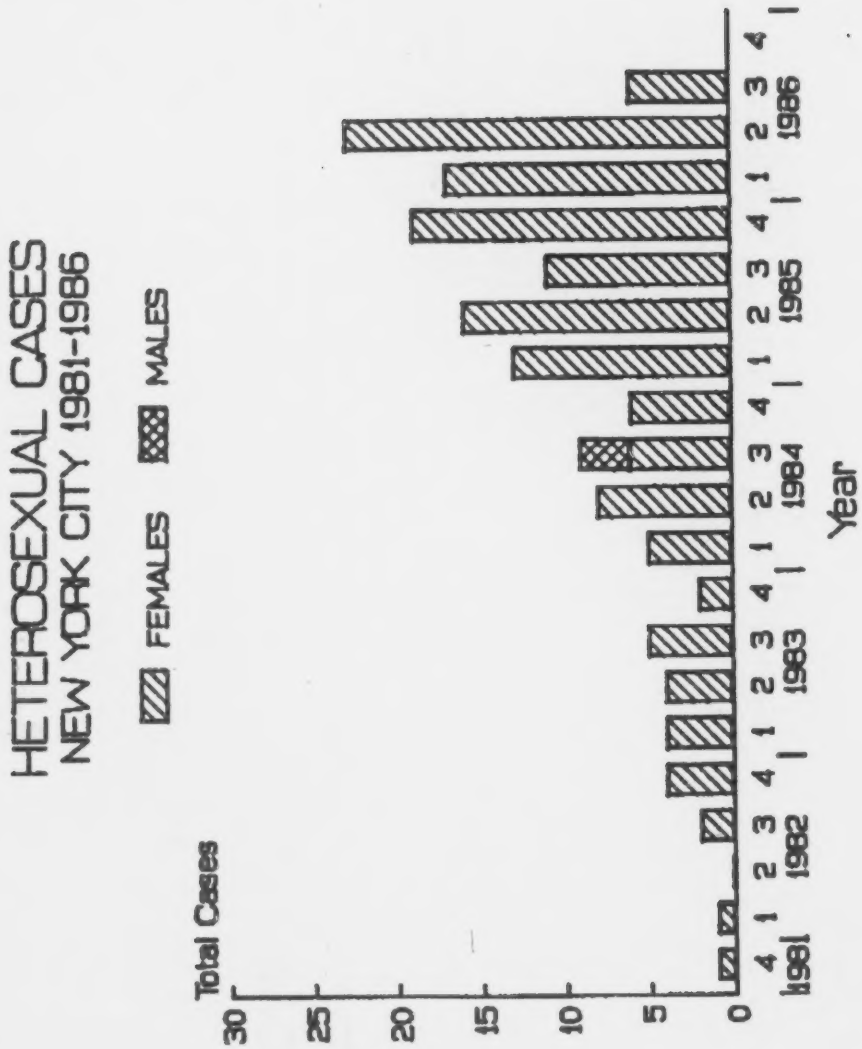
Females <45 yrs and Children



Transfusion associated cases excluded

Chart 2

Chart 3


HETEROSEXUAL CASES
NEW YORK CITY 1981-1986
FEMALES
MALES
Total Cases
30
25
20
15
10
5
0
4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4
1981 1982 1983 1984 1985 1986
Year

NYC PEDIATRIC AIDS CASES
By Risk Groups, March 1987

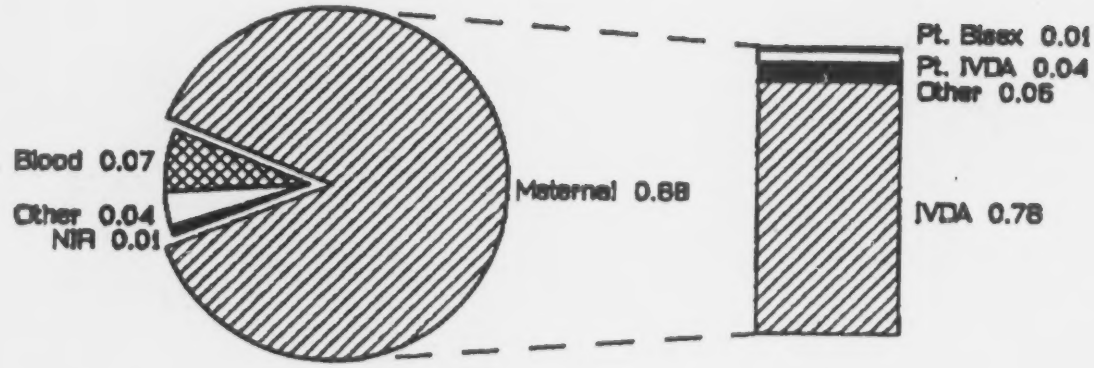
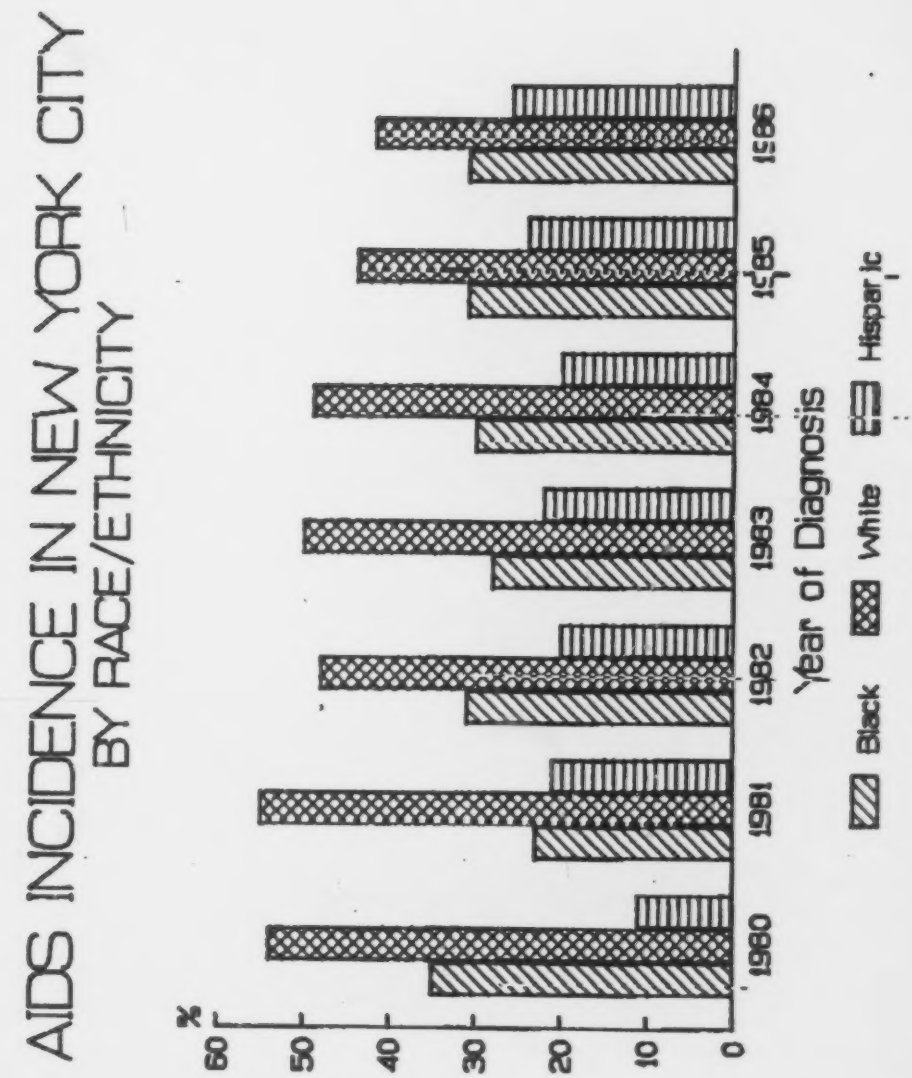


Chart 4

Chart 5


AIDS INCIDENCE IN NEW YORK CITY
BY RACE/ETHNICITY
%
60
50
40
30
20
10
0
1980
1981
1982
1983
1984
1985
1986
Year of Diagnosis
Black
White
Hispanic

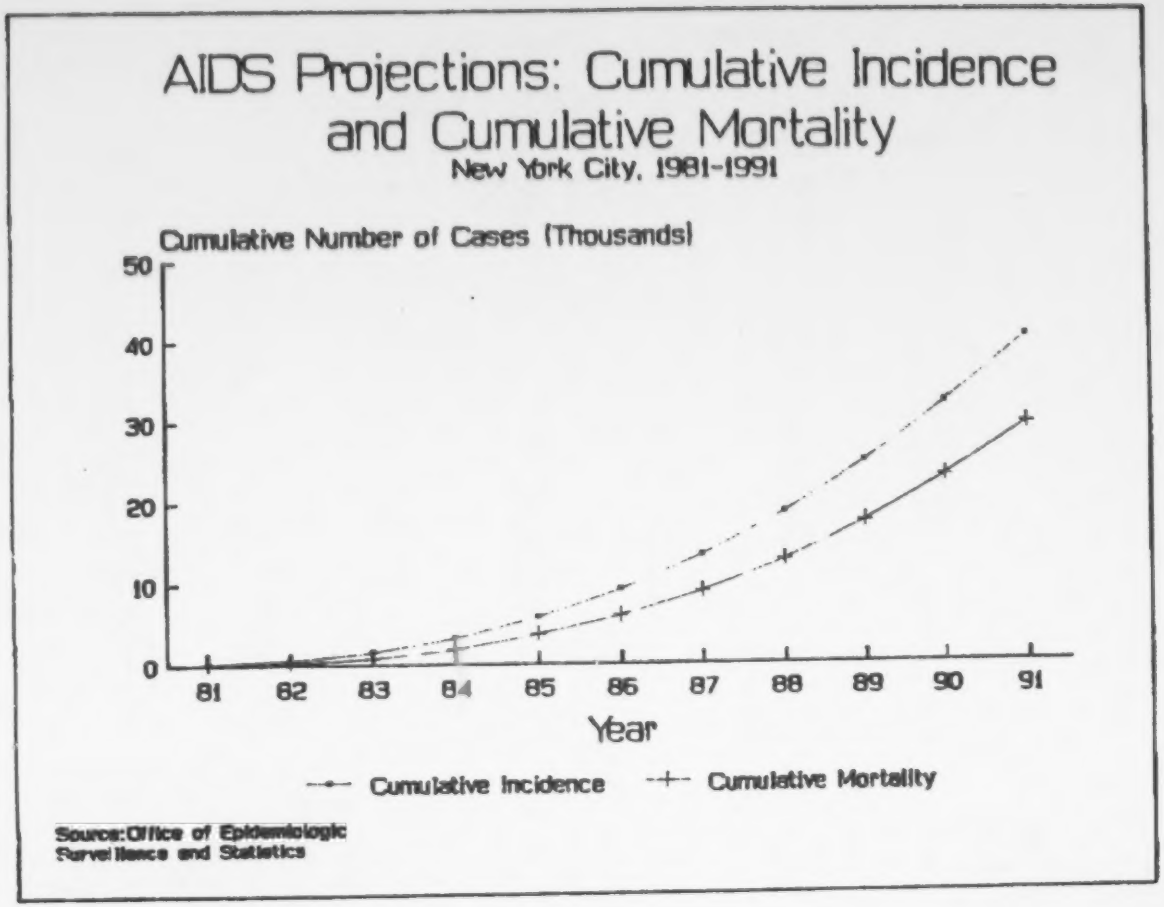

AIDS Projections: Cumulative Incidence and Cumulative Mortality
New York City, 1981-1991
Cumulative Number of Cases (Thousands)
50
40
30
20
10
0
81
82
83
84
85
86
87
88
89
90
91
Year
Cumulative Incidence
Cumulative Mortality
Source: Office of Epidemiologic Surveillance and Statistics

Chart 6

Pneumonia and Tuberculosis Mortality among Narcotic Users

New York City, 1978-1985

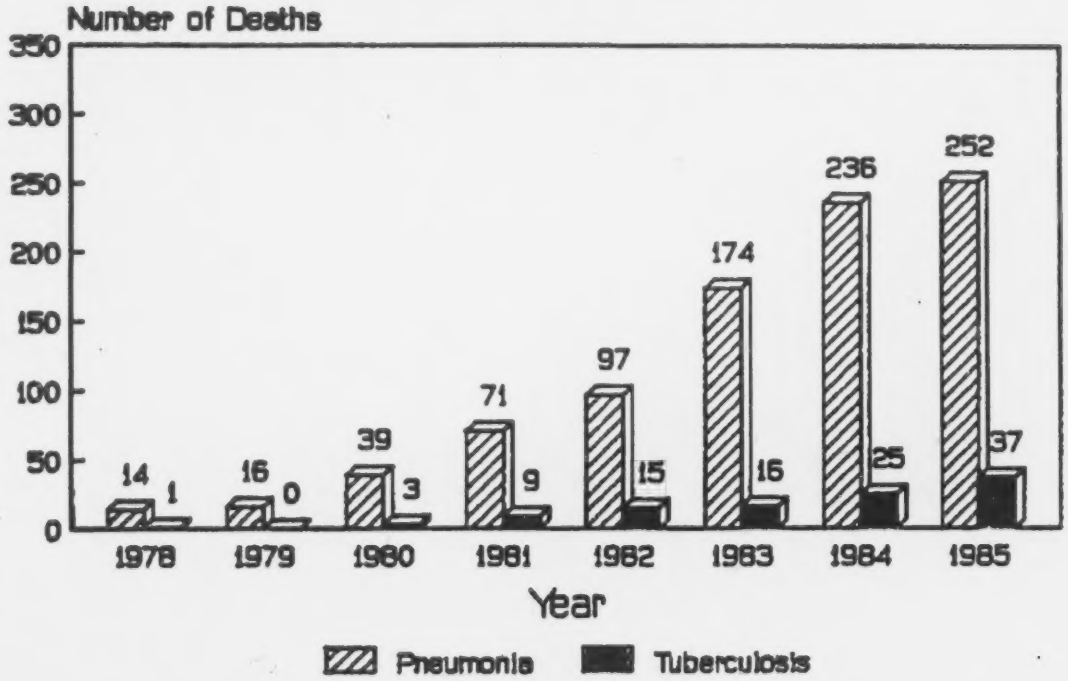
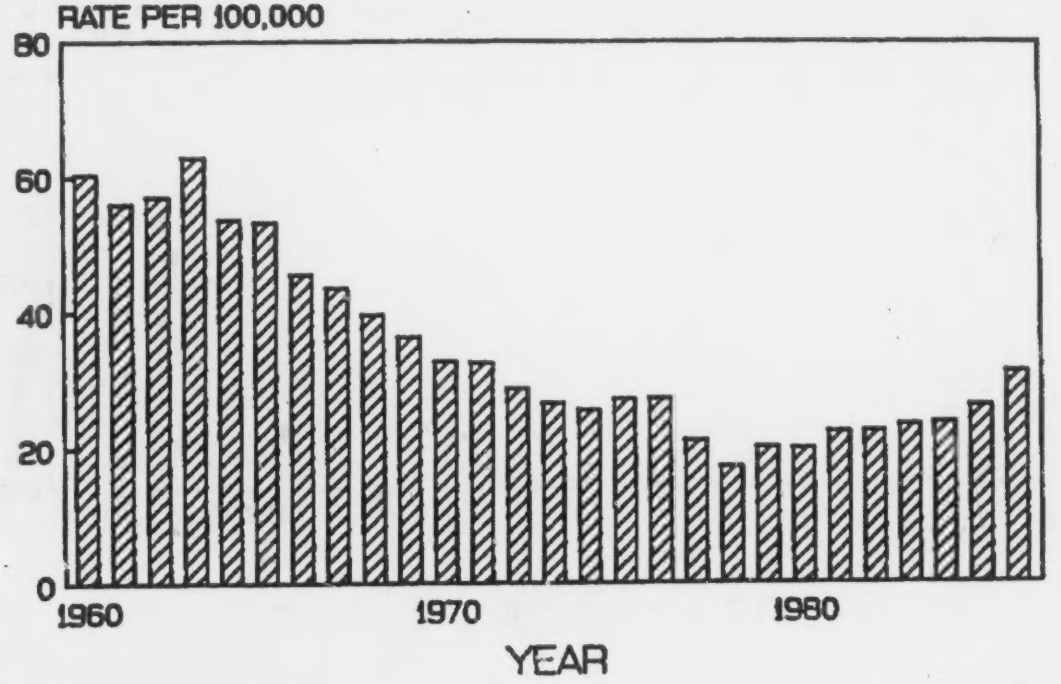


Chart 7

TUBERCULOSIS MORBIDITY RATES
NEW YORK CITY, 1960-1986*



PROJECTED BASED ON 10 MONTHS

Chart 8

The CHAIRMAN. If you get $385 million total in New York City, and $90 million from City funds, where does the rest of the money come from?

Dr. JOSEPH. These are Medicaid funds, other entitlement funds; there are some grant funds from the Federal Government; there are private funds that flow into, such as the pro bono work of advertising agencies.

The CHAIRMAN. Okay. Dr. Werdegar? I notice San Francisco is a leader in alternative programs and a unique outreach program for women. So we are looking forward to your testimony.

Dr. WERDEGAR. Senator Kennedy, I have been involved with the epidemic from its start in San Francisco, and I would offer the observation that the epidemic has been underestimated at every turn throughout, probably is still underestimated, and although now, individuals do speak of rather staggering figures, even the chart you showed earlier in this session with that exponential or rapid rise, the projections may actually be higher still.

As one earlier speaker pointed out, if some of the drugs do prolong life, and there is evidence that they do, but the individuals are still quite ill, the number of individuals in the Nation with AIDS and ARC will actually be even larger than shown in those projections.

Also, when those projections were made in the Coolfont meetings about a year ago, they lacked some of the information about the increasing numbers of individuals coming down six years, seven years and eight years after they had turned antibody-positive. We certainly know from our own studies that at the end of seven years, two-thirds of individuals who had turned antibody-positive developed either AIDS or ARC, and the numbers seem to increase each successive year.

So I can attest that the epidemic is just constantly underestimated, even though we now recognize its gravity.

I think the legislation you have introduced is really excellent. I think the dollar numbers are going to increase over the years inescapably, but the beauty of the legislation is that it really provides, for once, a framework for nationally addressing the whole issue and in a balanced way. It is comprehensive, and it deals with all aspects.

In my own experience, in San Francisco, the Health Department has sort of served as the convener. It has been the point of coordination for the epidemic, and we have had to, because of the great severity of the epidemic in San Francisco. You must realize in this city of 750,000, we have 10 percent of the Nation's epidemic, and one of every eight or nine adult men in the city are antibody-positive. It is just quite horrendous.

I will turn first to the patient care side, which you were so interested in. Initially, all of the care was given at our county hospital, and it had a model AIDS ward; it developed an outpatient program, and it was the only place in the city in which one could get care.

Well, the hospital would have drowned fairly soon if it did not get help occurring elsewhere. So physicians elsewhere in the community were recruited, educated, asked to admit patients to their community hospitals, so that now in San Francisco, every commu-

nity hospital and the V.A. hospital—every community hospital admits AIDS patients. The Kaiser Hospital System has a very substantial number, and the number in the county hospital is now only one-third of the total, although the numbers have continued to rise.

There are a couple of important points, and they are reflected in your legislation. One, you have to move the care outside of principal hospitals and get it into all community hospitals and involve family physicians, general internists, involve community physicians in the whole process, and use all of the community hospitals. You are dealing with a national illness in which you require that approach; you cannot just give the care in a few selected hospitals.

Second, you are going to have to instruct a lot of physicians and nurses about the care, and frankly, in a city that has a lot of physicians, we still find in San Francisco a dearth of physicians who are prepared to handle this illness and recognize that we will just have to have a crash program for training physicians, nurses, mental health workers, social workers, throughout the country to care for what we see.

We also recognize that if we kept patients in the hospital a long time, we would not have the beds, and the costs are about $700, $800, $900 a day in the hospital, as compared to much lower costs at home, with home care services, or in skilled nursing facilities. So we have tried to move care out of the hospital.

As I mentioned, though, reimbursement rates, say, through Medicaid programs, are such that you are well-rewarded for acute care—you generally are reimbursed—but you are not reimbursed for home care services, and you are not reimbursed at all—well, you are just not reimbursed at a level that will induce skilled nursing facilities to accept patients. I would say our greatest worry on the patient care side of the equation is that we are not going to have enough skilled nursing care beds for men who are blind, demented, requiring care throughout a 24-hour cycle with bathing, feeding and looking after, because the reimbursement rates just do not induce convalescent hospitals to accept such patients.

Moreover, those convalescent hospitals that we have nationwide are really oriented to care of the elderly, and they just do not know how to take care of patients with AIDS; very few have accepted patients with AIDS, and you are going to have a major bottleneck in the whole spectrum of care services by the lack of these so-called skilled nursing care beds.

The educational activities have been stressed, and I will not reiterate. In our community, too, where we have been vigorous about offering antibody testing, since about last November or December, the numbers interested, increasing numbers of heterosexuals interested in getting the test, has meant that we have fallen behind, and it is now nine or ten weeks, where it used to be one week to get an appointment for antibody testing. And the amount of moneys coming in from Federal and State, CDC and State sources, have not allowed us to keep up.

The education in the community, particularly—well, throughout—in minority groups, substance abusers, amongst the gay-bisexual, requires very avid involvement of those communities themselves and getting money from the health department—hopefully,

money that comes from Federal sources—out to community-based agencies, so that the message is sort of of the people, by the people, for the people. It is the only way it is effective, and you need community-based organizations in the Black community, Asian community, Hispanic community, gay community, women's organizations, getting the message out in cooperation with the health department.

You asked about our programs for women. In San Francisco we have had relatively few cases among women; 25 as of April 30.

We have a project called "Project AWARE" that is specifically for women. Through this program we have been able to reach out to at-risk women; prostitutes, sexually active women. We have learned much about how to target our education/prevention materials for women at-risk. But we have much more to do in this area.

We just have not had anywhere near the kind of money that it takes to do that properly, and it is a very high priority.

I realize other speakers have things to say, and so I will not dwell too long. We have asked in San Francisco for the availability of the U.S. Public Health Service Hospital and have approached political representatives to help us get that mothballed hospital available as a skilled nursing care facility, day care facility, and as a facility where we can conduct research on many aspects of AIDS care and treatment.

Still another aspect of research—any have mentioned basic biomedical, epidemiological, clinical, testing the drugs—still another is what I would call health services research, always looking to see how we can give the care most efficiently, most economically, with the proper staffing, in the most humane way, and we were hoping that Public Health Hospital might be a resource to our community to conduct such health services research.

I will just conclude by expressing gratitude on behalf of our community for your work, your staff and colleagues, in bringing together legislation which is the first piece of really comprehensive legislation that gets at all aspects of the problem.

Thank you.

[The prepared statement of Dr. Werdegar follows:]

TESTIMONY ON AIDS

U.S. Senate Committee on Labor & Human Resources

May 15, 1987

David Werdegar, M.D., M.P.H.

Director

City and County of San Francisco

Department of Public Health

I am pleased that you have invited me to speak before your committee on the serious public health issue of AIDS. I will briefly describe the effect AIDS has had on San Francisco, then address each of four areas where significant federal attention is needed.

San Francisco has had the most cases of AIDS per capita of any city in the United States. The first case was diagnosed in 1980; to date we have had 3,190 cases and 1,906 deaths. This translates into nearly 5 cases for every 1,000 residents. The effect has been greatly more severe in the gay community; 96% of the cases have been gay and bisexual men. It is safe to say that today, nearly every resident of San Francisco has known someone who has died of AIDS.

San Francisco's elected officials, and especially Mayor Dianne Feinstein, have reacted most responsibly and compassionately to the AIDS epidemic. Currently, over $13 million of the total city's overall budget is specifically appropriated for AIDS services. These monies are augmented by certain State and Federal grants, but the primary funding for our AIDS services, it must be said, continues to be from City dollars. This cannot continue, as the City faces severe budgetary constraints and as the epidemic grows.

In San Francisco we provide a comprehensive AIDS program that, we believe, is in many ways a model for the nation. It includes the following:

- Clinical services in the acute and subacute care settings. Currently, one-third of the city's AIDS patients are treated at our County facility, San Francisco General Hospital. Every community hospital in the city now participates in AIDS care, whereas only a few years ago the care was only available at the San Francisco General.

- Clinical services provided out of the hospital, in patients' homes, outpatient clinics, and residential facilities established specifically for patients who would otherwise be homeless.

- Education/prevention services to the groups at greatest risk: gay and bisexual men, minority communities; substance abusers; as well as education/prevention services for the general public and for health care providers.

- Counseling services to AIDS and ARC patients, to those who are antibody positive, their families and loved ones, and to a group we call the "worried well".

- Testing for the AIDS virus with associated counseling/education services to make the testing effective, to all those who seek it. Testing is available with anonymity,under health department auspices. Confidential testing is also available through practicing physicians, with written informed consent of the patient.

- Substance abuse treatment programs, including residential care, methadone maintenance and other approaches.

- Research into all aspects of the disease, including clinical trials of experimental drugs.

With the exception of the last three categories which are primarily federally and state-funded, these efforts are mainly financed by the City government. In addition, San Franciscans have been extremely generous both in terms of financial contributions and volunteer time so that the City's actual commitment to AIDS is far greater than the dollar amount from City tax funds would suggest.

The main focus of our effort has been on prevention of new HIV infections,mainly through education.

The focus of our health services program has been to provide effective, humane care at the most appropriate level of treatment. In San Francisco, the average cost of care to an AIDS patient, over their life from the date of diagnosis, is $50,000 or less. This compares to over $100,000 in New York City and in other areas throughout the nation.

However, I should point out that the federal reimbursement structure is such that our lower cost of care is most heavily borne by the local government. Consider the following: through Medicaid, federal and state governments reimburse fully for hospital-based acute care. Reimbursements for lower levels of care -- outpatient treatments, home care and skilled nursing facility care -- are nonexistent or else far below costs. In addition, reimbursements for some of the most critical aspects of our program, education and counseling receive little federal or state support.

This means that while the cost of patient care in San Francisco is the lowest in the nation, the City bears the brunt of that cost. Because the federal reimbursement structure largely does not include non-hospital care, there is little financial incentive for other jurisdictions to adopt the San Francisco treatment model.

* * *

While the program I described is a comprehensive one that seeks to provide services at all levels, we have begun to see gaps in needed services that will continue to grow as the epidemic continues its alarming spread. The need for a greatly augmented federal role should be increasingly apparent to all.

I. Need to expand voluntary testing: Currently, the federal government, as well as some state governments including California, fund sites for the testing of the AIDS virus, and the associated counseling that is essential to prevent spread of the disease and explain test results to individuals. This program needs to be expanded enormously, to the $200 million level proposed by Senator Kennedy.

At the present, San Franciscans seeking an antibody test must wait 8 weeks before they can be scheduled for an appointment at our alternative (anonymous) test site. This is a critically long time to a person who is concerned about AIDS and may be spreading the disease. Other jurisdictions are experiencing similar waiting periods. We expect these waiting times to become even longer, as the concern over AIDS continues to grow throughout the nation.

Additionally we need to expand non-anonymous or "confidential" testing so that patients will be encouraged to seek the test from their personal physician. Federal support for these programs, especially in the health department and community clinics, will greatly facilitate this.

In order to be effective in preventing the spread of AIDS, the testing must continue to be accompanied by counseling and education.

In sum, expansion of this program will enable:

- broader availability of testing of all individuals in appropriate settings (i.e., doctor's office, anonymous test site, community-based facility) with maintenance;

- readily available testing for groups at highest risk, such as women who plan to become pregnant, or persons entering sexual relationships;

- continued protection of the blood supply by providing alternate sites for at-risk persons to receive the test;

- maintenance of voluntary approach to testing with confidentiality or anonymity;

- maximum use of antibody testing as a major element in health education/prevention efforts.

II. Need to greatly expand education/prevention programs. Currently, there is almost no federal funding for education and prevention efforts. In San Francisco, nearly all of our efforts are locally supported, with some additional State monies. Senator Kennedy's call for $300 million is essential to the fight against AIDS.

The only way we know to prevent AIDS is by avoiding high-risk activities such as "unsafe" sex or drug abuse. In addition, education is needed to combat the fear and hysteria that surrounds the disease. This means that education about AIDS and the behaviors that allow it to be transmitted is critical to prevent the spread of the disease.

Education/prevention efforts are needed in all these areas:

A. For high-risk communities, such as minorities, gay or bisexual men, or drug abusers. In order to be effective, the education must be tailored to the audience and must involve the participation together with the Health Department, of community-based health care organizations. Culturally sensitive and language appropriate educational materials are needed to reach ethnic and racial minorities successfully. There is room for much innovation and creativity.

In San Francisco we recognized from the beginning that it is easiest for individuals to accept information on very personal matters, such as information on sexual behavior, if that information is presented by persons with similar backgrounds. We established a network of agencies in the gay community to develop appropriate educational materials for all types of media targeted to gay and bisexual men. We are working to establish similar networks of community providers in the Black, Hispanic and various Asian communities. We also work through our network of substance abuse treatment programs to reach drug users.

In all of these efforts, the Health Department provides the medical and technical expertise and overall coordination while the community-based agency provides the cultural sensitivity, outreach and personal contacts.

B. Expanded education for the general public is also needed. As anyone who reads the newspapers or watches television knows, people are increasingly concerned about the risk of AIDS. A consistent and continuing educational endeavor, using all the media, workplace opportunities, schools and community agencies is required to inform the public about AIDS and advise about behaviors that will maintain health.

C. **Education for health care providers** is desperately needed as well. Even in San Francisco, which has many physicians, we find a dearth of physicians prepared for care of patients with AIDS. There is a shortage of nurses and this concerns us greatly with respect to AIDS care. There is very substantial need for training -- in very short order -- health care workers in every category: primary care physicians; physician specialists; nurses for all settings of care (acute, subacute, home, ambulatory); social workers; psychologists and counselors; health educators and public health personnel.

Funding for education and training of these health workers in our professional schools, teaching hospitals and professional societies is needed and with a view to rapid implementation of the programs.

I cannot emphasize too strongly the need for a well organized, vigorous and sustained education/prevention effort to avoid the spread of AIDS throughout our nation and the world. The size of the investment is miniscule compared to the sizeable costs that will result, both in terms of lives and in terms of patient treatments, if we do not make every effort to prevent spread of the disease now.

III. Need for accelerated research for a cure and for an AIDS vaccine. The Surgeon General has predicted that neither an AIDS cure nor a vaccine will be available for several years. The federal government needs to increase research to speed the development of these, as recommended in Senator Kennedy's legislation.

Increased research should involve establishment of regional research centers. Communities hardest-hit by AIDS are the most appropriate sites for such centers to ensure coordinated and comprehensive research into the disease. Located where the greatest number of patients are under care. There would be ideal opportunity for the collaboration and synergistic efforts of basic scientists, epidemiologists, clinical investigators and the physicians and nurses most directly involved in AIDS care.

In addition, training grants are needed so that more researchers are trained and recruited into AIDS research. This will permit highly focused attention to the disease and powerful research efforts continue proceeding at the most rapid pace possible.

IV. Expansion of clinical trials and planning for treatment. Because the effects of the AIDS epidemic will be with us for many years to come, we need to work now to ensure that we will be able to accommodate the future need. Senator Kennedy's proposal to provide monies for expansion of clinical trials, and to plan for treatment needs, will allow us to fully use community resources to provide the most effective AIDS care for now, and for the future.

The Federal Centers for Disease Control predicts 50,000 new cases annually by 1990. Because the disease has an extremely long incubation period, even if its spread were stopped today, we would continue to see new cases develop for some time to come. Thus the need to plan now for the pending effects of the disease is critical.

In San Francisco, we have recognized that our current resources are already close to capacity. At San Francisco General Hospital, patients who no longer need acute hospital care must often wait for two weeks or even longer, at county expense, before they can be placed at an appropriate levels of care in the community. This means they occupy an acute care bed when they can be most appropriately treated in a subacute facility, at home, in a residential facility, or in the outpatient setting. In our outpatient clinics, patients wait in the halls and sit on the floors because our space is so limited. In addition, the new medication AZT, which prolongs life, often necessitates frequent blood transfusions and increased care at all levels.

We have taken several steps in order to attempt to address this growing problem:

A. A "community consortium" of physicians helps ensure that all patients have access to state-of-the-art treatment. Professional staff at San Francisco General Hospital meet regularly with community providers to discuss the latest developments in treatment of the disease and to encourage more physicians to treat patients in the community. A consortium of physicians committed to AIDS care has been a valuable mechanism for mutal support, planning and information sharing.

B. Continuous planning and administrative efforts. I, other Health Department administrators and physicians at San Francisco General relentlessly attempt to work with community providers to expand community resources for AIDS treatment. This includes development of new residential facilities, more skilled nursing beds, additional outpatient clinics and more practicing physician involvement in AIDS care.

C. Reactivated Use of U.S. Public Health Service Hospitals for AIDS Care. In San Francisco, I have proposed that the federal government reactivate the U.S. Public Health Services Hospital to provide skilled nursing care and related AIDS services to patients throughout the San Francisco Bay Area. I understand that other regions throughout the country also have facilities formerly used as Public Health Service hospitals that also may be suitable for such a purpose.

In addition, in order to ensure that patients can receive adequate AIDS care throughout the community, the federal government must expand the availability of clinical trials for experimental drugs. In San Francisco, through our community consortium, we would then be able to send AIDS patients throughout the community for state-of-the-art AIDS care.

* * *

In conclusion, the need for greater federal attention to the AIDS epidemic is absolutely essential. We are engaged in combat against a rapidly evolving and dangerous epidemic. It calls for our very best. Public health officials throughout the country, such as the Surgeon General, health directors such as myself, prominent researchers, and others, have been emphasizing the enormity of the epidemic, and the devastative effects it could have on the U.S. and the world. The legislation introduced by Senator Kennedy would go a long way towards realizing the federal commitment that is necessary. It takes meaningful steps to address AIDS as effectively as possible, now.

The CHAIRMAN. On the PHS Hospital, who would pay for its operation?

Dr. WERDEGAR. The City cannot. Some moneys would come back in the form of reimbursements from Medicaid or other insurance, but it would not equal the task of operating the facility, and we would need Federal.

The Mayor has been most supportive. I would say Dianne Feinstein has been a leader and has given the political support that has allowed our community to have an organized program, and has indicated that just availability of the building without operating funds would not suffice. The City is quite stretched to its limit and has been most generous in the AIDS epidemic.

The CHAIRMAN. I know Congresswoman Boxer has been working on it, too. She has been in touch with our office.

Dr. WERDEGAR. That is correct.

The CHAIRMAN. We will try and be of what help we can.

Dr. WERDEGAR. Thank you.

The CHAIRMAN. Let me just ask a question with regard to alternative care for AIDS. What are the outpatient services that fall between the cracks, that do not get taken care of?

Dr. WERDEGAR. Well, we realize that you can do a lot in the outpatient setting if you have the will, the space, and training and orientation to do so.

The patients who come there may often receive drugs by an I.V. infusion, which may take several hours. Sometimes they receive transfusions that may take several hours. All of these things, however, can be done in the outpatient setting. We have also discovered that the same outpatient setting is a source of what I would call group support. It is a home base for people coming on a regular basis. And that gave rise to the concept of, really, a day care center which can be done in community hospitals, in which an individual comes for treatment, counseling, perhaps congregate dining, having some meals together; the mutual group support, socialization that can occur, and then the individual returns home where family and friends can continue the care during the evening and night hours.

There are a number of things done in the outpatient setting for which we receive no reimbursements, particularly through the Medicaid Program, on which we rely very heavily. There is a certain drug given for a form of retinitis that can quickly cause blindness in AIDS patients. It is a so-called CMV retinitis which within days can cause blindness. We give this drug by intravenous infusion. It is not reimbursed by Medicaid. So you will find that there are many outpatient forms of care that fall between the cracks because they are not reimbursed, although they are obviously very cost-effective.

One additional point—and forgive me if I neglected it—it is about the public health hospitals. Throughout the Nation, public hospitals, city, metropolitan hospitals and county hospitals, have really borne the brunt of AIDS care, and without them I do not know how the Nation would have provided AIDS care. These are hospitals that, as you know, are always chronically underfunded, greatly overburdened and have many other responsibilities for care of the poor in the community. And the public hospitals are finding

themselves in quite a squeeze to provide all of the care needed for AIDS and also to meet all of their other commitments. And I am hopeful that one aspect of your legislation will see moneys coming to urban hospitals, metropolitan hospitals, public hospitals, to get them the support they need.

The CHAIRMAN. Well, that was true 20 years ago, and it is just as true today. I have been to San Francisco Hospital, and also out in Watts and the Cooke County Hospital. We have got Boston City Hospital—I was there probably ten days ago—they are hard-pressed. Many of those facilities are the older buildings, and they are just deteriorating and, as you mentioned, are really at the cutting edge of every kind of health crisis problem in the community.

I am certainly mindful of the help that they need. Whether we are able to do very much for it will be something that we can try and pursue. I think it is worthwhile to remind us of the importance of those hospitals in terms of the whole health care system. I mean, when you take the percentage of health care that is distributed by those county hospitals in terms of the community, it is really extraordinary.

Mr. Ungvarski, we look forward to hearing from you.

Mr. Gossett, you are a very patient man here on this Friday afternoon, but we value very much your patience, and we look forward to hearing from you.

Mr. Ungvarski?

Mr. UNGVARSKI. Mr. Chairman, my name is Peter Ungvarski. I am the Director of the AIDS Program for the Visiting Nurse Service of New York, in New York City. I am testifying on behalf of the National Association for Home Care.

I would like to commend you and your Committee for holding this hearing and would like to thank you for having me testify.

Home care is especially appropriate and effective for persons with AIDS because it enables the persons with AIDS to spend their remaining days in familiar surroundings. It provides maximum independence and dignity to persons with AIDS, and it significantly improves the quality of life for them.

Home care also allows the greatest opportunity for family members and significant others to be part of that care. And, a very important issue, home care costs substantially less than institutional care.

Homemaker, home health aide services and nursing services can support the person with AIDS who may no longer easily manage activities of daily living, thus allowing him to remain in the home rather than in an institution, and to maintain a greater independence.

Given the nature of the disease, a coordinated plan of care should have home care services at its core, involving the hospital for acute and/or intensive care needs only, and bringing in additional specialized services when needed.

Finally, home care for persons with AIDS costs considerably less than institutional care. In a study conducted by Peter Arno of the Institute for Health Policy Studies of the School of Medicine at the University of California in San Francisco in June of 1986, the average cost of care for a person with AIDS in a municipal hospital in New York City was found to be around $800. Under the Home Care

Program that I direct in New York City, the average cost per day for the care of a person with AIDS is $81.40.

The AIDS Program that I direct for the Visiting Nurse Service is the largest AIDS home care program in the Nation. The City of New York, acting through the Department of Social Services, through the Human Resources Administration, has contracted with the Visiting Nurse Service to provide home care services for Medicaid-eligible persons with AIDS and AIDS-Related Complex. Under this program, comprehensive multidisciplinary care is provided.

Additional services required by this client population related to the severity of illness include the administration of intravenous drugs and medications, or nutrition. We are currently at-home-infusing the drugs discussed by the previous speaker on a regular basis.

However, the potential to continue this program and to expand these programs depends on funding, because they are cost losses, and they are quite extensive. If these programs were expanded, they could allow for earlier discharges from hospitals, improving the quality of life for persons with AIDS as well as substantially reducing the cost of care.

Under our Medicaid Program, 800 persons with AIDS or ARC have been admitted since January 1986. The average weekly caseload, including both children and adults, is 275 clients. Under this program, the average length of stay is 45 days, and the average cost per case is $3,663.

I would now like to offer a few recommendations.

Current Medicare requirements necessitate two years' disability prior to eligibility. These requirements are totally inappropriate for persons with AIDS, who rarely live two years after diagnosis. Medicare coverage needs to be expanded to cover persons with AIDS upon diagnosis.

The Medicare hospice benefit as currently structured also excludes persons with AIDS in many instances. Barriers to hospice services include requirement of a primary caregiver, certification of terminality, a life expectancy of six months or less, and a total expenditure cap of $7,300. These requirements should be weighed for persons with AIDS who do not fit the normal pattern of the terminally ill, since aggressive treatment is frequently used to the very end, in hopes of finding a cure or a remission.

In conclusion, with the current climate of cost containment, many health care facilities and organizations are reluctant to or unable to provide the necessary education for health care workers to adequately care for persons with AIDS. The educational program conducted by the Visiting Nurse Service of New York has been successful in not only training both professional and paraprofessional staff in the needs of this particular client population, but has also served to eliminate the fears and misconceptions surrounding this disease.

I appreciate the opportunity to be here today to discuss these important issues and would be happy to respond to any questions you may have.

[The prepared statement of Mr. Ungvarski follows:]

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VISITING NURSE SERVICE OF NEW YORK

REPRESENTING

THE NATIONAL ASSOCIATION FOR HOME CARE

BEFORE THE

LABOR AND HUMAN RESOURCES COMMITTEE

MAY 15, 1987

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

MY NAME IS PETER UNGVARSKI. I AM THE DIRECTOR OF THE AIDS PROGRAM FOR THE VISITING NURSE SERVICE OF NEW YORK (VNSNY) IN NEW YORK CITY. I AM TESTIFYING ON BEHALF OF THE NATIONAL ASSOCIATION FOR HOME CARE (NAHC), THE NATION'S LARGEST PROFESSIONAL ORGANIZATION REPRESENTING THE INTERESTS OF HOME HEALTH AGENCIES, HOMEMAKER-HOME HEALTH AIDE ORGANIZATIONS AND HOSPICES, WITH APPROXIMATELY 5,000 MEMBERS. ON BEHALF OF THESE ORGANIZATIONS, I WOULD LIKE TO COMMEND YOUR COMMITTEE FOR HOLDING THIS HEARING TO FOCUS ON ACQUIRED IMMUNITY DEFICIENCY SYNDROME (AIDS), AN ISSUE OF VITAL CONCERN TO ALL AMERICANS.

ACCORDING TO THE SURGEON GENERAL'S REPORT ON AIDS ISSUED EARLIER THIS YEAR, BY THE END OF 1991 AN ESTIMATED 270,000 CASES OF AIDS WILL HAVE OCCURRED WITHIN THE DECADE SINCE THE DISEASE WAS FIRST RECOGNIZED. THE U.S. PUBLIC HEALTH SERVICE HAS PREDICTED THAT THERE WILL BE AT LEAST 3,000 CHILDREN WITH AIDS BY 1991. MANY MORE -- BOTH CHILDREN AND ADULTS -- WILL TEST POSITIVE FOR THE AIDS VIRUS BUT NOT SHOW SIGNS OF TERMINAL ILLNESS AT THAT TIME. EVEN MORE FRIGHTENING THAN THE EPIDEMIC PROPORTIONS OF THIS DISEASE IS THE FACT THAT IT HAS A 100 PERCENT FATALITY RATE, AND NO KNOWN CURE.

THE IMPORTANCE OF HOME CARE FOR PERSONS WITH AIDS

THE HOME CARE COMMUNITY HAS RESPONDED TO THE GROWING HEALTH CARE NEEDS OF PERSONS WITH AIDS BY DESIGNING SPECIAL PROGRAMS AND ADAPTING CURRENT ONES TO MEET THEIR NEEDS. HOME CARE IS ESPECIALLY APPROPRIATE AND EFFECTIVE FOR PERSONS WITH AIDS BECAUSE:

- HOME CARE ENABLES PERSONS WITH AIDS TO SPEND THEIR REMAINING DAYS IN FAMILIAR SURROUNDINGS, THUS PROVIDING MAXIMUM EMOTIONAL SUPPORT FOR THEM AND THEIR FAMILIES;

- HOME CARE PROVIDES MAXIMUM INDEPENDENCE AND DIGNITY TO PERSONS WITH AIDS WHO ARE LOSING BOTH THROUGH THIS DEVASTATING, DEBILITATING ILLNESS;

- HOME CARE SIGNIFICANTLY IMPROVES THE QUALITY OF LIFE FOR PERSONS WITH AIDS AND PROVIDES THE OPPORTUNITY TO MAXIMIZE USE OF THEIR REMAINING TIME;

- HOME CARE ALLOWS THE GREATEST OPPORTUNITY FOR FAMILY MEMBERS AND SIGNIFICANT OTHERS TO BECOME EDUCATED ABOUT AIDS AND TO PARTICIPATE IN CARE OF A PERSON WITH AIDS;

- HOME CARE ALLOWS FOR USE OF AN APPROPRIATE CONTINUUM OF CARE, BASED ON THE LEAST RESTRICTIVE SETTING; AND, FINALLY

- HOME CARE COSTS SUBSTANTIALLY LESS THAN INSTITUTIONAL CARE.

AIDS IS AN ISOLATING DISEASE, BOTH FROM A PHYSICAL AND PSYCHO-SOCIAL PERSPECTIVE. A GREAT DEAL OF EMOTIONAL SUPPORT IS CRITICALLY NECESSARY FOR BOTH THE PERSON WITH AIDS, THE FAMILY, AND SIGNIFICANT OTHERS. THE PROTECTIVE NATURE OF THE HOME CAN MITIGATE THE EFFECTS OF BOTH ASPECTS OF THE ISOLATION BY PROVIDING THE PERSON WITH AIDS WITH COMFORT IN THE FACE OF POSSIBLE OSTRACISM OUTSIDE, AND IN THE FACE OF THE TERMINAL NATURE OF THE DISEASE.

A DIAGNOSIS OF AIDS IS PHYSICALLY AS WELL AS EMOTIONALLY DEBILITATING. HOMEMAKER-HOME HEALTH AIDE SERVICES CAN SUPPORT THE PERSON WITH AIDS WHO MAY NO LONGER EASILY MANAGE ACTIVITIES SUCH AS COOKING AND CLEANING, THUS ALLOWING HIM TO REMAIN AT HOME RATHER THAN IN AN INSTITUTION, AND TO MAINTAIN GREATER INDEPENDENCE.

GIVEN THE NATURE OF THE DISEASE, A COORDINATED PLAN OF CARE SHOULD HAVE HOME CARE SERVICES AT ITS CORE, INVOLVING THE HOSPITAL FOR ACUTE AND/OR INTENSIVE CARE NEEDS ONLY, AND BRINGING IN ADDITIONAL SPECIALIZED SERVICES WHEN NEEDED.

FINALLY, HOME CARE FOR PERSONS WITH AIDS COSTS CONSIDERABLY LESS THAN INSTITUTIONAL CARE. THE U.S. PUBLIC HEALTH SERVICE (CENTERS FOR DISEASE CONTROL) ESTIMATES THAT THE AVERAGE COST OF CARE PER PERSON WITH ACTIVE AIDS IS $140,000. IN A STUDY CONDUCTED BY PETER ARNO OF THE INSTITUTE FOR HEALTH POLICY STUDIES OF THE SCHOOL OF MEDICINE AT THE UNIVERSITY OF CALIFORNIA IN SAN

FRANCISCO IN JUNE 1986, THE AVERAGE COST OF CARE FOR A PERSON WITH AIDS IN A MUNICIPAL HOSPITAL WAS FOUND TO BE $800 PER DAY IN NEW YORK CITY. UNDER THE HOME CARE PROGRAM THAT I DIRECT IN NEW YORK CITY, THE AVERAGE COST PER DAY FOR CARE OF A PERSON WITH AIDS IS $81.40.

SIGNIFICANT AIDS HOME CARE PROGRAMS

THE AIDS PROGRAM THAT I DIRECT FOR VNSNY IS THE LARGEST AIDS HOME CARE PROGRAM IN THE NATION. THE CITY OF NEW YORK, ACTING THROUGH THE DEPARTMENT OF SOCIAL SERVICES THROUGH THE HUMAN RESOURCES ADMINISTRATION, HAS CONTRACTED WITH VNSNY TO PROVIDE HOME CARE SERVICES FOR MEDICAID-ELIGIBLE PERSONS WITH AIDS AND AIDS RELATED COMPLEX (ARC). UNDER THIS PROGRAM, THE FOLLOWING SERVICES ARE PROVIDED:

(1) PROFESSIONAL NURSING ASSESSMENT, CARE AND CASE MANAGEMENT

(2) HOME ATTENDANT OR HOME HEALTH AIDE SERVICES

(3) CONTINUOUS NURSING CARE AT HOME IN CERTAIN CASES, BY A LICENSED PRACTICAL NURSE (LPN) OR A REGISTERED NURSE (RN)

(4) MEDICAL SOCIAL WORK SERVICES

(5) PHYSICAL, OCCUPATIONAL, AND SPEECH THERAPY, WHEN INDICATED

(6) INTERFACING WITH THE PRIMARY PHYSICIAN AND HOSPITAL STAFF IN THE PLANNING OF CARE AND CASE MANAGEMENT

(7) EDUCATION FOR PROFESSIONAL AND PARAPROFESSIONAL STAFF

(8) NURSING CONSULTATION ON PROBLEM CASES OR IN CRISIS SITUATIONS

ADDITIONAL SERVICES REQUIRED BY THIS CLIENT POPULATION RELATED TO SEVERITY OF ILLNESS INCLUDE THE ADMINISTRATION OF INTRAVENOUS (IV) MEDICATIONS AND/OR NUTRITION, AND ARE BEING PROVIDED AT HOME ON A LONG-TERM BASIS ALSO. THE POTENTIAL TO CONTINUE THIS AND TO EXPAND THESE PROGRAMS COULD ALLOW FOR EARLIER DISCHARGES FROM HOSPITALS, IMPROVING QUALITY OF LIFE FOR PERSONS WITH AIDS AS WELL AS SUBSTANTIALLY REDUCING COSTS OF CARE.

UNDER OUR MEDICAID PROGRAM, 800 PERSONS WITH AIDS OR ARC HAVE BEEN ADMITTED SINCE JANUARY 1986. THE AVERAGE WEEKLY CASELOAD, INCLUDING BOTH CHILDREN AND ADULTS, IS 275 CLIENTS. (THIS PROGRAM ACCOUNTS FOR THE MAJORITY OF OUR AIDS CASELOAD, WHICH AVERAGES 350 - 400 PATIENTS PER WEEK, INCLUDING NON-MEDICAID CLIENTS.) UNDER THIS PROGRAM, THE AVERAGE LENGTH OF STAY IS 45 DAYS AND THE AVERAGE COST PER CASE IS $3,663.

OUR PROJECT IN NEW YORK IS BUT ONE OF MANY IN THE COUNTRY WHICH HAVE BEEN CREATED TO SERVE PERSONS WITH AIDS. HOME CARE FOR THESE PEOPLE CAN BE ADMINISTERED IN A VARIETY OF HOME SETTINGS AND THROUGH A VARIETY OF MEANS.

- THE STARCROSS MONASTERY IS A LAY CATHOLIC COMMUNITY LOCATED ON A 150-ACRE FARM, NORTHWEST OF SAN FRANCISCO. ON THE FARM, A ROMAN CATHOLIC BROTHER AND TWO SISTERS ARE THE CAREGIVERS AND THE FAMILY FOR CHILDREN WHO ARE LIVING AND DYING WITH AIDS. THE MORNING-GLORY PROGRAM ESTABLISHED BY STARCROSS OFFERS AN ALTERNATIVE TO INSTITUTIONALIZATION -- HOME CARE AND FAMILY CARE. WITH THE HELP OF VOLUNTEERS AND THE ASSISTANCE OF MEMBERS OF THE MEDICAL COMMUNITY, CHILDREN WITH AIDS WHO HAD NO ONE TO CARE FOR THEM, HAVE FOUND A LOVING, SUPPORTIVE ENVIRONMENT AT STARCROSS.

- IN WASHINGTON, D.C., THE WHITMAN-WALKER CLINIC HAS ADDED HOME CARE TO ITS LONG LIST OF SERVICES AND PROGRAMS FOR PEOPLE WITH AIDS. THE CLINIC HAS BEGUN RECRUITING AND TRAINING CHORE AIDES AND PERSONAL CARE AIDES WHO ARE WILLING TO PROVIDE HOME CARE SERVICES FOR A MINIMAL SALARY. SINCE JUNE 1986, THESE AIDES HAVE CARED FOR 100 PEOPLE WITH AIDS IN THE D.C. AREA.

NAHC RECOMMENDATIONS

DESPITE THE LAUDATORY RESPONSE IN STATES SUCH AS NEW YORK AND CALIFORNIA TO THE BURGEONING NUMBER OF AIDS CASES, THERE ARE STILL MANY OBSTACLES TO ADEQUATE FUNDING FOR HOME CARE FOR AIDS PATIENTS. WHILE ALL 50 STATES REPORT AIDS CASES, MOST ARE CLUSTERED IN METROPOLITAN AREAS IN FOUR STATES - CALIFORNIA, FLORIDA, NEW JERSEY, AND NEW YORK. THESE FOUR STATES PLUS MASSACHUSETTS ARE SPENDING THE MOST ON AIDS-RELATED PROGRAMS AND ACTIVITIES AND ACCOUNT FOR 85% OF ALL STATE FUNDING TO DATE. WITH THE PROJECTED DRAMATIC RISE IN THE NUMBERS OF PERSONS WITH AIDS, STATES WILL EXPERIENCE INCREASING DIFFICULTIES IN PROVIDING THE FINANCIAL WHEREWITHAL TO CARE FOR THEIR AIDS POPULATIONS, NECESSITATING FEDERAL FUNDING ASSISTANCE.

CURRENT MEDICARE REQUIREMENTS NECESSITATE TWO YEARS' DISABILITY PRIOR TO ELIGIBILITY. THESE REQUIREMENTS ARE TOTALLY INAPPROPRIATE FOR PERSONS WITH AIDS, WHO RARELY LIVE TWO YEARS AFTER DIAGNOSIS. MEDICARE COVERAGE NEEDS TO BE EXPANDED TO COVER PERSONS WITH AIDS UPON DIAGNOSIS.

THE MEDICARE HOSPICE BENEFIT,AS CURRENTLY STRUCTURED, ALSO EXCLUDES PERSONS WITH AIDS IN MANY INSTANCES. BARRIERS TO HOSPICE SERVICES INCLUDE REQUIREMENTS OF A PRIMARY CAREGIVER, CERTIFICATION OF TERMINALITY, A LIFE EXPECTANCY OF SIX MONTHS OR LESS, AND A TOTAL EXPENDITURE CAP OF $7,300. THESE REQUIREMENTS

SHOULD BE WAIVED FOR PERSONS WITH AIDS, WHO DO NOT FIT THE NORMAL PATTERN OF THE TERMINALLY ILL SINCE AGGRESSIVE TREATMENT IS FREQUENTLY USED TO THE VERY END, IN HOPES OF OBTAINING A CURE OR A REMISSION.

ONE LAST CONSIDERATION FOR THE COMMITTEE REGARDING THE APPROPRIATION OF FUNDS FOR THE PROVISION OF CARE FOR PERSONS WITH AIDS CONCERNS EDUCATIONAL COSTS FOR HEALTH CARE WORKERS. WITH THE CURRENT CLIMATE OF COST CONTAINMENT, MANY HEALTH CARE FACILITIES AND ORGANIZATIONS ARE RELUCTANT TO OR UNABLE TO PROVIDE THE NECESSARY EDUCATION FOR HEALTH CARE WORKERS TO ADEQUATELY CARE FOR PERSONS WITH AIDS. THE EDUCATIONAL PROGRAM CONDUCTED BY VNSNY HAS BEEN SUCCESSFUL IN NOT ONLY TRAINING BOTH PROFESSIONAL AND PARAPROFESSIONAL STAFF ON THE NEEDS OF THIS PARTICULAR CLIENT POPULATION, BUT HAS ALSO SERVED TO ELIMINATE THE FEARS AND MISCONCEPTIONS SURROUNDING THIS DISEASE.

I APPRECIATE THE OPPORTUNITY TO BE HERE TODAY TO DISCUSS THESE IMPORTANT ISSUES. I WILL BE HAPPY TO RESPOND TO ANY QUESTIONS YOU MIGHT HAVE.

The CHAIRMAN. Thank you.

Where is New York on that Medicaid waiver? Do they give many Medicaid waivers there——

Mr. UNGVARSKI. We have a special program that has been established by the City of New York for this population, and it is quite an extensive demonstration project.

The CHAIRMAN. And what do you find are the principal problems in terms of reimbursement? Do you get good cooperation from the private insurance? What has been the experience?

Mr. UNGVARSKI. The private insurance, those are the patients that fall between the cracks. The City of New York has done a marvelous job, and I am very happy to be connected with this Medicaid Program. But the private insurance company is where the patients fall between the cracks. We are totally limited. In some cases, we will open a case, we will take on the responsibility of providing the care, and suddenly things are withdrawn at which point, if the person is at risk, we continue the care, and we are the ones that are losing millions of dollars a year in maintaining this until we can get Medicaid in place and get other reimbursement in place.

The CHAIRMAN. Dr. Joseph, is there anything you would like to add?

Dr. JOSEPH. Well, I would add one thing, because there is a thread that ties the last two speakers together. And that is again the issue that so much of the complications of trying to provide treatment for AIDS patients in New York City relates to I.V. drug abuse. These people are sicker; they are much more difficult to take care of; they have more frequent hospitalizations.

Going back to the public hospital issue, 20 percent of all the acute medical-surgical beds in the New York City municipal hospital system today are occupied by people with AIDS or ARC, and we think that we are probably undercounting the actual morbidity and mortality posed by the virus by 50 to 100 percent.

The death rates among I.V. drug users in New York City have risen, I think, three to four times in the last five years. Most of these are people who are not diagnosed as having AIDS or ARC; they are people who are immuno-compromised by the virus and die of nonspecific pneumonia, endocarditis, tuberculosis, et cetera. So there is enormous uncounted morbidity and an enormous uncounted load on the public hospital system, I expect in San Francisco and elsewhere, as well as New York City.

The CHAIRMAN. Is New York State providing a special reimbursement rate for AIDS?

Dr. JOSEPH. There is a negotiated reimbursement rate in New York City for inpatient care—for ambulatory care, not for inpatient care. I believe that is correct.

The CHAIRMAN. What about AIDS-related illness?

Dr. JOSEPH. I am not sure.

The CHAIRMAN. Well, some of the matters that you have mentioned here are related to AIDS, and whether they would be able to get reimbursement for that——

Dr. JOSEPH. These would not fall, no. You would have to meet the diagnosis criteria. CDC is going to be changing those criteria this

summer, and that will also add another load on the reimbursement structure, probably as much as 20 or 30 percent.

The CHAIRMAN. I see.

Mr. Gossett, we welcome you here and look forward to your testimony.

Mr. GOSSETT. Thank you, Senator.

I appreciate the opportunity to speak about AIDS and the national tragedy that the country is aiming towards.

I am here today to emphasize that our society has an important tool to curb the spread of the AIDS virus. It is an aggressive, funded communication program. I believe we are obligated to see that every person in this Nation knows what the risks are and how they can protect themselves from this lethal epidemic.

However, as an advertising professional, I can tell you we have not scratched the surface in our effort to communicate AIDS prevention information to our fellow citizens.

In this Nation in 1987, we have the know-how, the ability, and the means to communicate a life-saving message. If we are prepared to get to work and commit the require resources, we can teach people how to protect themselves against the chance of becoming infected with the AIDS virus.

We need a calculated program of paid advertising to encourage behavior change.

I believe we should treat AIDS prevention like a marketing opportunity. We should develop a strategy aimed at educating the whole country, and particularly the most vulnerable citizens, on AIDS prevention.

When a major corporation launches a package goods product like soap or toothpaste, they spend about $50 million in the first year, sometimes much more. That is what is required to influence a consumer purchasing decision.

To fight AIDS, we need to influence more fundamental behavior; sexual behavior, and the habits of addicted intravenous drug users. And we need to do more than launch AIDS prevention. We need to reinforce it with a consistent education program.

Now, donated public service advertising will not do that job. We want to reach all Americans, and we need control over when and where messages appear. The only way to assure control and therefore provide—and this is very important—measurable results is to pay for advertising time and space.

First of all, it is unrealistic to expect broadcasters or publishers to bear all the responsibility by donating time and space. Public service advertising is generally placed in unsold time and space. We need AIDS prevention messages to appear during the most popular broadcast times and in the most visible areas, as was mentioned earlier today.

We must target single women and men age 18 to 34, as well as adolescents who may be experimenting with sexual intimacy for the first time.

Since we know that AIDS is having a disproportionate impact on blacks and Hispanics, we must certainly target these audiences. It is possible to design strategies that will penetrate the world of intravenous drug users. We can certainly reach their families and

friends and those who may have had sexual contact with I.V. drug users.

This week the New York City Department of Health released an AIDS prevention campaign. The first phase of the City's expanded prevention effort targets heterosexual women and men and was created pro bono by my company.

New York Life Insurance Company in partnership with other insurers has committed the first $1.5 million to place this campaign as paid advertising. That is enough for three months or more of a year-long City campaign that media planners estimate will cost about $6 million.

That is what it will take to do the job in New York City only. We estimate that a national campaign, with emphasis in high-incidence cities, will cost approximately $50 million for the first year.

The CHAIRMAN. Is that just television?

Mr. GOSSETT. No, no. That is a complete media program of radio, television, car cards and bus posters. And I have for the record a media program, as designed for the City of New York, if I can leave it for that purpose.

I urge your Committee to authorize the creation of a paid national AIDS prevention program. I also urge you to provide the resources to create effective and appropriate educational programs in other settings such as schools and the workplace.

Thank you very much.

[The prepared statement of Mr. Gossett, with an attachment, follows:]

STATEMENT OF MILT GOSSETT

MR. CHAIRMAN;

THANK YOU FOR THIS OPPORTUNITY TO SPEAK TO YOU ABOUT THE EMERGING TRAGEDY THAT IS CLEARLY OUR NATION'S MOST URGENT HEALTH PROBLEM: AIDS.

MY NAME IS MILT GOSSETT. I AM THE CHAIRMAN OF AN ADVERTISING COMPANY -- SAATCHI & SAATCHI COMPTON WORLDWIDE. I AM HERE TODAY TO EMPHASIZE THAT OUR SOCIETY HAS AN IMPORTANT TOOL TO CURB THE SPREAD OF THE AIDS VIRUS. IT'S AN AGGRESSIVE FUNDED COMMUNICATION PROGRAM..

I BELIEVE WE ARE OBLIGATED TO SEE THAT EVERY PERSON IN THIS NATION KNOWS WHAT THE RISKS ARE AND HOW THEY CAN PROTECT THEMSELVES FROM THIS LETHAL EPIDEMIC.

HOWEVER, AS AN ADVERTISING PROFESSIONAL WITH 38 YEARS EXPERIENCE, I CAN TELL YOU THAT WE HAVE NOT SCRATCHED THE SURFACE IN OUR EFFORT TO COMMUNICATE AIDS PREVENTION INFORMATION TO OUR FELLOW CITIZENS.

SENATORS, IN THIS NATION IN 1987, WE HAVE THE KNOW-HOW, THE ABILITY AND THE MEANS TO COMMUNICATE A LIFE-SAVING MESSAGE.

IF WE'RE PREPARED TO GET TO WORK AND COMMIT THE REQUIRED RESOURCES, WE CAN TEACH PEOPLE HOW TO PROTECT THEMSELVES AGAINST THE CHANCE OF BECOMING INFECTED WITH THE AIDS VIRUS.

WE NEED A CALCULATED PROGRAM OF PAID ADVERTISING TO ENCOURAGE BEHAVIOR CHANGE.

.../

I BELIEVE THAT WE SHOULD TREAT AIDS PREVENTION LIKE A MARKETING OPPORTUNITY - WE SHOULD DEVELOP A STRATEGY AIMED AT EDUCATING THE WHOLE COUNTRY - AND PARTICULARLY THE MOST VULNERABLE CITIZENS - ON AIDS PREVENTION. WHEN A MAJOR CORPORATION LAUNCHES A PACKAGE GOODS PRODUCT LIKE SOAP OR TOOTHPASTE, THEY SPEND ABOUT $50 MILLION IN THE FIRST YEAR. THAT'S WHAT'S REQUIRED TO INFLUENCE A CONSUMER PURCHASING DECISION.

TO FIGHT AIDS, WE NEED TO INFLUENCE MORE FUNDAMENTAL BEHAVIOR; SEXUAL BEHAVIOR AND THE HABITS OF ADDICTED INTRAVENOUS DRUG USERS. AND, WE NEED TO DO MORE THAN LAUNCH AIDS PREVENTION -- WE NEED TO REINFORCE IT WITH A CONSISTENT ADVERTISING PROGRAM.

DONATED PUBLIC SERVICE ADVERTISING WON'T DO THE JOB. IF WE WANT TO REACH ALL AMERICANS, WE NEED CONTROL OVER WHEN AND WHERE MESSAGES APPEAR.

THE ONLY WAY TO ASSURE CONTROL AND MEASURE RESULTS IS TO PAY FOR ADVERTISING TIME AND SPACE. IT IS UNREALISTIC TO EXPECT BROADCASTERS OR PUBLISHERS TO BEAR ALL THE RESPONSIBILITY.

PUBLIC SERVICE ADVERTISING IS GENERALLY PLACED IN UNSOLD TIME AND SPACE. WE NEED AIDS PREVENTION MESSAGES TO APPEAR DURING THE MOST POPULAR BROADCAST PROGRAMS.

WE MUST TARGET SINGLE WOMEN AND MEN AGES 18 TO 34 AS WELL AS ADOLESCENTS WHO MAY BE EXPERIMENTING WITH SEXUAL INTIMACY FOR THE FIRST TIME. SINCE WE KNOW THAT AIDS IS HAVING A DISPROPORTIONATE IMPACT ON BLACKS AND HISPANICS, WE MUST TARGET THESE AUDIENCES.

IT IS POSSIBLE TO DESIGN STRATEGIES THAT WILL PENETRATE THE WORLD OF INTRAVENOUS DRUG USERS -- WE CAN CERTAINLY REACH THEIR FAMILIES AND FRIENDS, AND THOSE WHO MAY HAVE SEXUAL CONTACT WITH IV DRUG USERS.

THIS WEEK THE NEW YORK CITY DEPARTMENT OF HEALTH RELEASED AN AIDS PREVENTION CAMPAIGN. THE FIRST PHASE OF THE CITY'S EXPANDED PREVENTION EFFORT TARGETS HETEROSEXUAL WOMEN AND MEN AND WAS CREATED --PRO BONO -- BY SAATCHI & SAATCHI COMPTON.

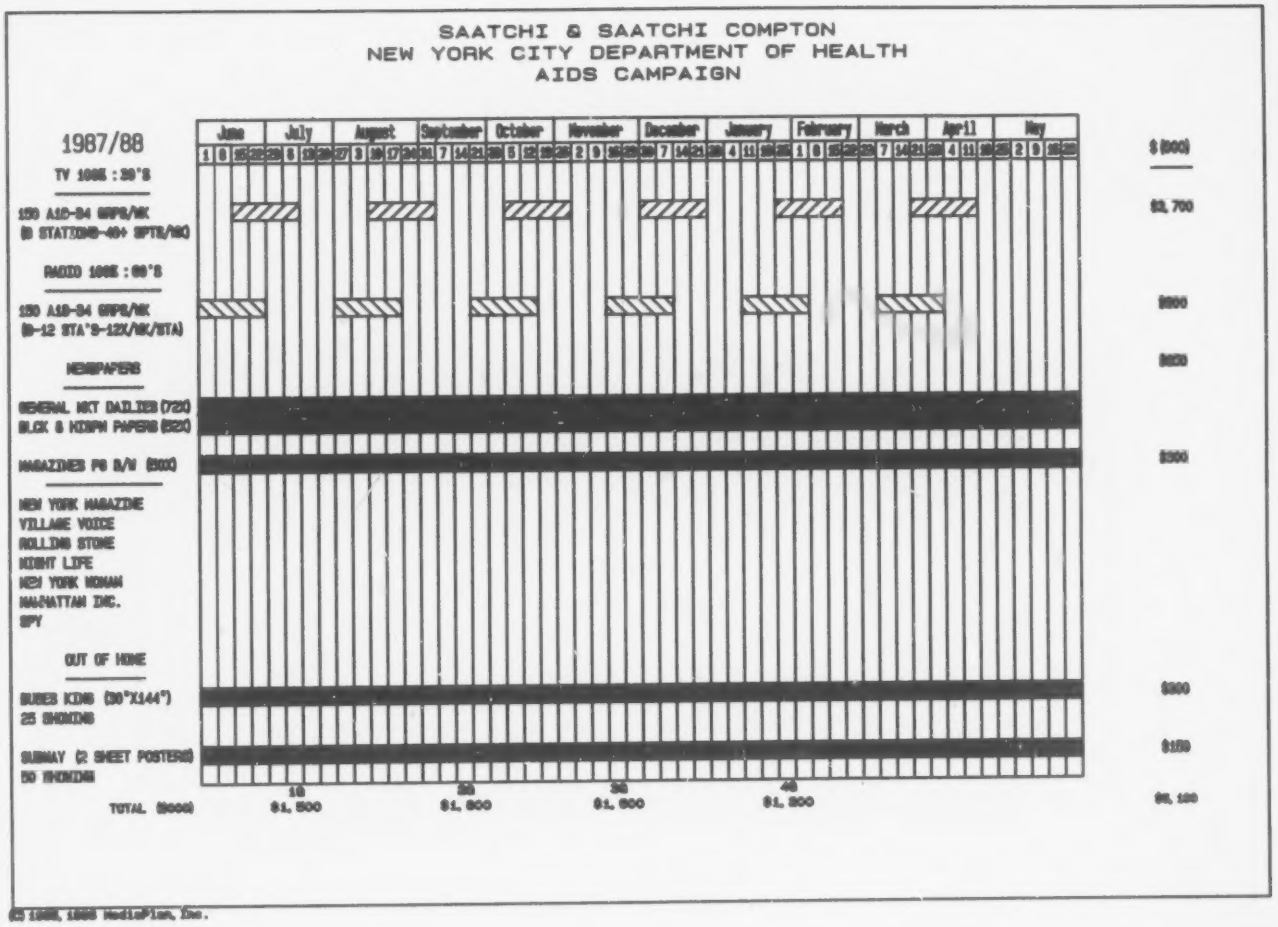
NEW YORK LIFE INSURANCE -- IN PARTNERSHIP WITH OTHER INSURORS -- HAS COMMITTED THE FIRST $1.5 MILLION TO PLACE THIS CAMPAIGN AS PAID ADVERTISING. THAT'S ENOUGH FOR THREE MONTHS OR MORE OF A YEAR-LONG CITY CAMPAIGN THE MEDIA PLANNERS ESTIMATE WILL COST $6 MILLION.

THAT'S WHAT IT WILL TAKE TO DO THE JOB IN NEW YORK ONLY. WE ESTIMATE THAT A NATIONAL CAMPAIGN -- WITH EMPHASIS IN HIGH INCIDENCE CITIES -- WILL COST APPROXIMATELY $50 MILLION FOR THE FIRST YEAR.

SENATORS, I DON'T THINK WE CAN EXPECT PRIVATE INDUSTRY TO PICK UP THAT TAB. AIDS IS A NATIONAL HEALTH EMERGENCY. IT DEMANDS A NATIONAL RESPONSE.

I URGE YOUR COMMITTEE TO AUTHORIZE THE CREATION OF A PAID, NATIONAL AIDS PREVENTION CAMPAIGN. I ALSO URGE YOU TO PROVIDE THE RESOURCES TO CREATE EFFECTIVE AND APPROPRIATE EDUCATIONAL PROGRAMS IN OTHER SETTINGS SUCH AS SCHOOLS AND THE WORKPLACE.

THANK YOU.



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The CHAIRMAN. I was just trying to sift through what would be appropriate in terms of your own estimates and what would be appropriate nationwide.

The Administration's is $57 million, and that is a total education program. And as I understand, you say that you need $50 million just to do the television and the radio; is that right?

Mr. GOSSETT. Television, radio, newspapers and magazines, sir. And it is possible to look at it another way. If you want to concentrate on target cities that comprise the bulk of the percentage of potential victims and victims, you would spend probably $25 to $30 million on ten target cities, which would make up a large part of the target.

The CHAIRMAN. What is your feeling about who ought to decide what is going to be shown in each community? Would you leave that up to community decision, community choice?

Mr. GOSSETT. I certainly would. I think that the tone of voice, the advertising message, any the explicitness that you might provide in one city, would have to be toned down for another city. But the main thing is to provide a straightforward, factual, educational message that is not short-circuited in any way by turning people off because of their beliefs or because of their attitudes. The attitude differences between the Midwest the West Coast and the East Coast on certain topics and subjects, we have discovered can be rather large.

I would also say that when we speak about television and magazine and newspaper advertising, we should not forget about direct marketing. I think it is possible to put together educational messages in brochures, leaflets and so on—that can be included as part of an effective communications effort against AIDS.

The CHAIRMAN. Okay. This is very helpful. I do not know whether you have had a chance to take a look at the recommendations—well, in our legislation, the recommendations that we are making on information and the purchase of television. I gather we can conclude that you would support the paid television advertisement as really the most appropriate way of getting the message across?

Mr. GOSSETT. One of the basic reasons is that paid advertising is measurable. In New York City, because the TV time is paid for, we know when and where the messages will run. We then are able with a research program to take a look at the attitudes, awareness and behavior of the audience before the advertising runs, during the advertising campaign, and after the advertising campaign. Therefore New York City can be a test city with information that will help other cities in the Nation direct their programs.

The CHAIRMAN. Okay. That is very helpful.

I want to thank all of our witnesses. It has been a very interesting and informative presentation this afternoon, and we are very much encouraged at the kinds of comments we have heard in terms of the direction that we are going with the legislation. We welcome suggestions and recommendations or changes from any of those who are so interested, and we are grateful to all of our witnesses for coming here this afternoon.

The Committee stands in recess.

[Whereupon, at 4:35 p.m., the Committee was adjourned.]

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